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WHC-EP-0257

Final Draft Resource Conservation and Recovery Act Interim Status Assessment of Thirteen Facilities

Prepared for the U.S. Department of Energy
Assistant Secretary for Defense Programs



Westinghouse
Hanford Company Richland, Washington

Hanford Operations and Engineering Contractor for the
U.S. Department of Energy under Contract DE-AC06-87RL10930



9 2 1 2 4 5 9 1 5 6 6 3

ACTION SCHEDULE REPORT LEGEND

SUA Identification: The stream, unit, or activity (SUA) identification.

Reg Citation: The regulatory requirement applicable to a specific stream, unit, or activity.

Status: The compliance status of a stream, unit, or activity with respect to a specific applicable regulation.

C: Complete: The task identified with a given report finding is complete.

AR: Action Required: An action is required to address a given report finding.

NR: Not Regulated: The SUA is currently not regulated under the associated applicable regulation.

Task Description: A description of the task resulting from an assessment finding.

**Scheduled
Comp Date:** The date by which a given task is scheduled to be completed.

**Actual
Comp Date:** The date by which an action was performed.

April 1989

Plant / Facility: 100-D PONDS

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
100-D PONDS	WAC 173-303-280	AR	INCLUDE DOCUMENTATION OF PROPER WASTE STREAM MANAGEMENT IN WASTE ANALYSIS PLAN SUPPORTING CLOSURE.	02/28/93	/ /
100-D PONDS	WAC 173-303-283	AR	INCLUDE DOCUMENTATION OF PROPER WASTE STREAM MANAGEMENT IN WASTE ANALYSIS PLAN SUPPORTING CLOSURE.	02/28/93	/ /
100-D PONDS	WAC 173-303-300	AR	DETERMINE ADEQUACY OF EXISTING WASTE CHARACTERIZATION.	12/31/89	/ /
100-D PONDS	WAC 173-303-300	AR	PREPARE WASTE ANALYSIS PLAN FOR FACILITY DISCHARGES.	12/31/89	/ /
100-D PONDS	WAC 173-303-310	AR	ERECT BARRIER AROUND FACILITY AND POST SIGNS VISIBLE FROM ALL APPROACHES.	07/31/89	/ /
100-D PONDS	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
100-D PONDS	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
100-D PONDS	WAC 173-303-380	AR	INCLUDE INSPECTION RECORDS, WASTE ANALYSIS, WASTE DESIGNATION, VOLUME DISCHARGE, AND PAST FACILITY OPERATING RECORDS IN OPERATING FILE(S).	07/31/89	/ /

April 1989

Plant / Facility: 100-D PONDS

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
100-D PONDS	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
100-D PONDS	40 CFR 265 SUB F	AR	INSTALL GROUNDWATER MONITORING WELLS PER TRI-PARTY AGREEMENT MILESTONE M-24-00. DATE SPECIFIC TO THIS UNIT HAS NOT BEEN ESTABLISHED AT THIS TIME.	/ /	/ /
100-D PONDS	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	02/28/93	/ /
100-D PONDS	40 CFR 265 SUB K	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	02/28/93	/ /
100-D PONDS	40 CFR 265 SUB Q	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	02/28/93	/ /

April 1989

Plant / Facility: 105-DR SODIUM FIRE FACILITY

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
FIRE FACILITY	WAC 173-303-310	AR	POST ACCESS CONTROL SIGNS VISIBLE FROM ALL APPROACHES TO BURN PORTION OF FACILITY.	05/31/89	/ /
FIRE FACILITY	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
FIRE FACILITY	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
FIRE FACILITY	WAC 173-303-330	AR	DEVELOP WRITTEN TRAINING PROGRAM FOR FACILITY PERSONNEL.	07/31/89	/ /
FIRE FACILITY	WAC 173-303-340	AR	PROVIDE PROPER NOTIFICATION TO APPROPRIATE EMERGENCY RESPONSE AUTHORITIES.	08/31/89	/ /
FIRE FACILITY	WAC 173-303-350	AR	DEVELOP FACILITY CONTINGENCY PLAN PER EMERGENCY PREPAREDNESS GUIDANCE.	10/01/89	/ /
FIRE FACILITY	WAC 173-303-360	AR	PREPARE FACILITY EMERGENCY RESPONSE PROCEDURES FOR CONTINGENCY PLAN INCLUSION.	10/01/89	/ /
FIRE FACILITY	WAC 173-303-360	AR	IDENTIFY FACILITY EMERGENCY COORDINATOR.	10/01/89	/ /
FIRE FACILITY	WAC 173-303-380	AR	MAINTAIN INSPECTION RECORDS IN FACILITY OPERATING RECORDS.	07/31/89	/ /

April 1989

Plant / Facility: 105-DR SODIUM FIRE FACILITY

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
FIRE FACILITY	WAC 173-303-380	AR	DOCUMENT INSPECTIONS OF FIRE EXTINGUISHERS.	07/31/89	/ /
FIRE FACILITY	40 CFR SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	09/30/90	/ /
FIRE FACILITY	40 CFR SUB P	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	09/30/90	/ /

April 1989

Plant / Facility: 183-H SOLAR EVAPORATION BASINS

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
SOLAR BASINS	WAC 173-303-320	AR	REVISE WRITTEN INSPECTION PLAN TO INCLUDE THE FREQUENCY OF INSPECTIONS AND INCLUDE SECURITY DIVICES IN THE SCOPE.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-340	AR	PROVIDE PROPER NOTIFICATION TO APPROPRIATE EMERGENCY RESPONSE AUTHORITIES.	08/31/89	/ /
SOLAR BASINS	WAC 173-303-350	AR	MAINTAIN COPY OF CONTINGENCY PLAN AT FACILITY BASINS.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-350	AR	INCLUDE 24-HOUR CONTACT NUMBERS OF EMERGENCY COORDINATORS.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-350	AR	INCLUDE EMERGENCY RESPONSE PROCEDURES IN CONTINGENCY PLAN SPECIFIC TO THE BASINS.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-350	AR	DEVELOP EMERGENCY RESPONSE PROCEDURES FOR INCLUSION IN CONTINGENCY PLAN.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-360	AR	ENSURE EMERGENCY COORDINATOR(S) ARE QUALIFIED.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-380	AR	DEVELOP OPERATING RECORD SYSTEM TO DETERMINE VOLUME OF WASTE MANAGED.	10/01/89	/ /
SOLAR BASINS	WAC 173-303-395	AR	POST BASINS WITH LABEL INDICATING MAJOR RISK OF WASTE.	07/31/89	/ /

April 1989

Plant / Facility: 183-H SOLAR EVAPORATION BASINS

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
SOLAR BASINS	40 CFR 265 SUB G	C	CLOSURE PLAN HAS BEEN SUBMITTED.	/ /	06/01/88
SOLAR BASINS	40 CFR 265 SUB J	AR	PERFORM DAILY INSPECTION OF TANK SYSTEM AND LIQUID LEVELS.	10/01/89	/ /
SOLAR BASINS	40 CFR 265 SUB J	C	CLOSURE PLAN HAS BEEN SUBMITTED.	/ /	06/01/88
SOLAR BASINS	40 CFR 265 SUB J	AR	POST BASINS WITH LABEL INDICATING MAJOR RISK OF WASTE.	07/31/89	/ /

April 1989

Plant / Facility: 1706-KE WASTE TREATMENT & STORAGE

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
1706-KE SYSTEM	WAC 173-303-320	AR	PREPARE WRITTEN PLAN TO INDICATE SCOPE AND FREQUENCY OF INSPECTIONS.	06/30/89	/ /
1706-KE SYSTEM	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	06/30/89	/ /
1706-KE SYSTEM	WAC 173-303-380	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	06/30/89	/ /
1706-KE SYSTEM	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
1706-KE SYSTEM	40 CFR 265 SUB G	NR	SUBMIT CLOSURE PLAN. APPLICABILITY CONTINGENT UPON PERMIT WITHDRAWAL SUCCESS.	/ /	/ /
1706-KE SYSTEM	40 CFR 265 SUB J	NR	SUBMIT CLOSURE PLAN. APPLICABILITY CONTINGENT UPON PERMIT WITHDRAWAL SUCCESS.	/ /	/ /
1706-KE SYSTEM	40 CFR 265 SUB P	NR	SUBMIT CLOSURE PLAN. APPLICABILITY CONTINGENT UPON PERMIT WITHDRAWAL SUCCESS.	/ /	/ /
1706-KE SYSTEM	40 CFR 265 SUB Q	NR	SUBMIT CLOSURE PLAN. APPLICABILITY CONTINGENT UPON PERMIT WITHDRAWAL SUCCESS.	/ /	/ /

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ACTION SCHEDULE

April 1989

Plant / Facility: 200 WEST ASH PIT

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
200 WEST ASH PIT	WAC 173-303-310	AR	INSTALL CONTINUOUS BARRIER AND SIGNS VISIBLE FROM ALL APPROACHES.	07/31/89	/ /
200 WEST ASH PIT	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING FREQUENCY AND SCOPE OF INSPECTIONS.	07/31/89	/ /
200 WEST ASH PIT	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
200 WEST ASH PIT	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
200 WEST ASH PIT	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /
200 WEST ASH PIT	40 CFR 265 SUB P	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /

April 1989

Plant / Facility: 216-S-10 POND AND DITCH

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
216-S-10 POND AND DITCH	WAC 173-303-280	AR	INCLUDE DOCUMENTATION OF PROPER WASTE STREAM MANAGEMENT IN WASTE ANALYSIS PLAN SUPPORTING CLOSURE.	05/31/96	/ /
216-S-10 POND AND DITCH	WAC 173-303-283	AR	INCLUDE DOCUMENTATION OF PROPER WASTE STREAM MANAGEMENT IN WASTE ANALYSIS PLAN SUPPORTING CLOSURE.	05/31/96	/ /
216-S-10 POND AND DITCH	WAC 173-303-300	AR	DETERMINE ADEQUACY OF EXISTING WASTE STREAM CHARACTERIZATION.	07/31/89	/ /
216-S-10 POND AND DITCH	WAC 173-303-300	AR	PREPARE WASTE ANALYSIS PLAN FOR FACILITY DISCHARGE.	12/31/89	/ /
216-S-10 POND AND DITCH	WAC 173-303-310	AR	DETERMINE APPROPRIATE BARRIER TO CONTROL ACCESS TO THE FACILITY.	12/31/89	/ /
216-S-10 POND AND DITCH	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
216-S-10 POND AND DITCH	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
216-S-10 POND AND DITCH	WAC 173-303-380	AR	NEGOTIATE DATE FOR INSTALLATION OF DISCHARGE VOLUME MONITORING FOR DITCH.	12/31/89	/ /

April 1989

Plant / Facility: 216-S-10 POND AND DITCH

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
216-S-10 POND AND DITCH	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
216-S-10 POND AND DITCH	40 CFR 265 SUB F	AR	INSTALL GROUNDWATER MONITORING WELLS PER TRI-PARTY AGREEMENT MILESTONE M-24-00.	12/31/90	/ /
216-S-10 POND AND DITCH	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	05/31/96	/ /
216-S-10 POND AND DITCH	40 CFR 265 SUB K	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	05/31/96	/ /

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ACTION SCHEDULE

April 1989

Plant / Facility: 216-U-12 CRIB

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
216-U-12 CRIB	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
216-U-12 CRIB	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
216-U-12 CRIB	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
216-U-12 CRIB	40 CFR SUB F	AR	INSTALL GROUNDWATER MONITORING WELLS PER TRI-PARTY AGREEMENT MILESTONE M-24-00.	12/31/90	/ /
216-U-12 CRIB	40 CFR SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/94	/ /
216-U-12 CRIB	40 CFR SUB H	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/94	/ /

April 1989

Plant / Facility: 2101-M POND

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
2101-M POND	WAC 173-303-300	AR	PREPARE WASTE ANALYSIS PLAN FOR FACILITY DISCHARGE.	09/30/89	/ /
2101-M POND	WAC 173-303-310	AR	POST ACCESS RESTRICTING SIGNS VISIBLE FROM ALL APPROACHES.	07/31/89	/ /
2101-M POND	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
2101-M POND	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
2101-M POND	WAC 173-303-380	AR	MAINTAIN DISCHARGE VOLUME, CHARACTERIZATION, AND DESIGNATION DATA IN FACILITY OPERATING RECORDS.	09/30/89	/ /
2101-M POND	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
2101-M POND	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	09/30/89	/ /
2101-M POND	40 CFR 265 SUB K	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	09/30/89	/ /

April 1989

Plant / Facility: 2727-S STORAGE FACILITY

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
2727-S STORAGE FACILITY	WAC 173-303-310	AR	REPAIR CHAIN BARRIER AROUND FACILITY.	05/31/89	/ /
2727-S STORAGE FACILITY	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
2727-S STORAGE FACILITY	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
2727-S STORAGE FACILITY	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN THE ANNUAL REPORT.	05/15/89	/ /
2727-S STORAGE FACILITY	40 CFR 265 SUB G	C	CLOSURE PLAN HAS BEEN SUBMITTED.	/ /	03/01/88

April 1989

Plant / Facility: 300 AREA SOLVENT EVAPORATOR

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
SOLVENT EVAPORATOR	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/31/89	/ /
SOLVENT EVAPORATOR	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
SOLVENT EVAPORATOR	WAC 173-303-380	AR	MAINTAIN INSPECTION RECORDS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
SOLVENT EVAPORATOR	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
SOLVENT EVAPORATOR	40 CFR 265 SUB G	C	CLOSURE PLAN HAS BEEN SUBMITTED.	/ /	04/01/88

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TION SCHEDULE

April 1989

Plant / Facility: E-8 BORROW PIT

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
E-8 BORROW PIT	WAC 173-303-310	AR	INSTALL CONTINUOUS BARRIER AND SIGNS VISIBLE FROM ALL APPROACHES.	07/31/89	/ /
E-8 BORROW PIT	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING FREQUENCY AND SCOPE OF INSPECTIONS.	07/31/89	/ /
E-8 BORROW PIT	WAC 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/31/89	/ /
E-8 BORROW PIT	WAC 173-303-390	AR	INCLUDE DANGEROUS WASTE MANAGEMENT ACTIVITIES IN ANNUAL REPORT.	05/15/89	/ /
E-8 BORROW PIT	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /
E-8 BORROW PIT	40 CFR 265 SUB P	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /

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TION SCHEDULE

April 1989

Plant / Facility: HEXONE TANKS

04/21/89

SUA Identification	Reg Citation	Status	Task Description	Scheduled Comp Date	Actual Comp Date
HEXONE TANKS	WAC 173-303-300	AR	PREPARE WASTE ANALYSIS PLAN FOR HEXONE TANK WASTE.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-320	AR	DEVELOP WRITTEN PLAN INDICATING SCOPE AND FREQUENCY OF INSPECTIONS.	07/03/89	/ /
HEXONE TANKS	Wac 173-303-320	AR	PROPERLY DOCUMENT INSPECTIONS IN FACILITY OPERATING RECORDS.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-330	AR	DEVELOP TRAINING PROGRAM SPECIFIC TO HEXONE TANK FACILITY.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-330	AR	MAINTAIN RECORDS OF HEXONE TANK OJT WITH TRAINING RECORDS.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-340	AR	PROVIDE PROPER NOTIFICATION TO APPROPRIATE EMERGENCY RESPONSE AUTHORITIES.	08/31/89	/ /
HEXONE TANKS	WAC 173-303-340	AR	MAINTAIN APPROPRIATE SPILL CONTROL AND DECONTAMINATION EQUIPMENT AT FACILITY.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-350	AR	DEVELOP CONTINGENCY PLAN SPECIFIC TO HEXONE TANKS FACILITY.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-360	AR	IDENTIFY QUALIFIED EMERGENCY COORDINATOR IN CONTINGENCY PLAN.	07/03/89	/ /

April 1989

Plant / Facility: HEXONE TANKS

04/21/89

<u>SUA Identification</u>	<u>Reg Citation</u>	<u>Status</u>	<u>Task Description</u>	<u>Scheduled Comp Date</u>	<u>Actual Comp Date</u>
HEXONE TANKS	WAC 173-303-360	AR	PREPARE EMERGENCY RESPONSE PROCEDURES SPECIFIC TO THE HEXONE TANKS FACILITY.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-395	AR	POST SIGNS INDICATING TANK CONTENTS AND MAJOR RISK(S) OF WASTE.	07/03/89	/ /
HEXONE TANKS	WAC 173-303-395	AR	HAVE FACILITY INSPECTED FOR COMPLIANCE WITH UNIFORM FIRE CODE.	07/03/89	/ /
HEXONE TANKS	40 CFR 265 SUB G	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /
HEXONE TANKS	40 CFR 265 SUB J	AR	INSPECT TANKS DAILY, INCLUDING LIQUID LEVELS, SPILL CONTROL EQUIPMENT, AND TANK STRUCTURES.	07/03/89	/ /
HEXONE TANKS	40 CFR 265 SUB J	AR	SUBMIT CLOSURE PLAN PER TRI-PARTY AGREEMENT MILESTONE M-20-00.	11/30/92	/ /
HEXONE TANKS	40 CFR 265 SUB J	AR	POST SIGNS INDICATING TANK CONTENTS AND MAJOR RISK(S) OF WASTE.	07/03/89	/ /

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Final Draft Resource Conservation and Recovery Act Interim Status Assessment:

100-D Ponds, 105-DR Sodium Fire Facility,
183-H Solar Evaporation Basins,
1706-KE Treatment and Storage Facility,
200 West Ash Pit, 216-S-10 Pond and Ditch,
216-U-12 Crib, 2101-M Pond,
2727-S Storage Facility, 300 Area Solvent
Evaporator, 304 Concretion Facility,
E-8 Borrow Pit, Hexone Tanks

P. J. Crane

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April 1989

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Assistant Secretary for Defense Programs



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ABSTRACT

In support the commitment to achieve regulatory compliance with Resource Conservation and Recovery Act interim status facility standards, the compliance status of 13 Hanford Site dangerous waste facilities under interim status has been assessed. None of the 13 facilities assessed presently receive dangerous waste; however, two actively manage dangerous waste from past operations. The remaining facilities may contain waste residues from past operations. The current operations at each facility were assessed for compliance with the existing Washington State Department of Ecology Dangerous Waste Regulations. Specific corrective action guidance is provided to correct noncompliant items noted during the assessment, although recommendations are made for a limited compliance program at facilities not managing dangerous waste.

ACRONYMS AND ABBREVIATIONS

Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
OJT	on-the-job training
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
TSD	treatment, storage, and disposal

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1.0 INTRODUCTION

The following report is an assessment of 13 Resource Conservation and Recovery Act (RCRA) interim status facilities located on the U.S. Department of Energy's (DOE) Hanford Site in southeastern Washington. Although all the facilities are currently undergoing closure and no longer receive dangerous waste, two of the facilities manage dangerous waste resulting from past operations: the Hexone Tanks and the 183-H Solar Evaporation Basins. The remaining facilities do not actively manage dangerous waste, but may contain waste residues resulting from past operations.

Since none of the facilities have been closed under an approved RCRA closure plan, the interim status requirements are technically applicable to each facility. However, many of the subject facilities do not actively manage dangerous waste. A less stringent compliance program is recommended for these facilities which are considered unclosed, but not operating, dangerous waste management units. The interim status requirements, specifically 40 CFR 265.113(b), provide a mechanism for facilities which are unclosed but not operating to comply with less than the entire set of interim status requirements. For example, a dangerous waste training program is not recommended for the 200 West Ash Pit, because the facility is no longer operated and does not manage dangerous waste in any manner, personnel do not work at the facility, and no dangerous waste hazard is associated with the facility. Security measures and inspections of the facility are recommended to prevent inadvertent intrusion or use of the facility prior to final closure.

A project has also been initiated to administratively withdraw the permit applications of several facilities. These are facilities for which Part A permit applications were submitted but are not believed to have operated as dangerous waste treatment, storage, or disposal facilities. One facility, the 1706-KE Waste Storage and Treatment Facility, is assessed in this report because of the difficulty in foretelling whether the facility is a viable candidate for permit withdrawal.

Although this report provides a discussion of the facilities' compliance status with regard to closure plans and groundwater monitoring requirements, assessment of the closure plans' and groundwater monitoring programs' adequacy is not within the scope of this report. Specific closure plan and groundwater monitoring program commitments are currently being scheduled through the Hanford Federal Facility Agreement and Consent Order negotiations.

The following is a brief discussion of each of the facilities assessed in the report. The remainder of the report is broken into distinct segments; each addressing a specific section of the regulations and the compliance status of the various facilities with respect to those regulations.

1.1 100-D PONDS

The 100-D Ponds are located on the Hanford Site immediately north of the 100-D Area. The two unlined ponds, before January 1986, received corrosive dangerous wastes from the regeneration of three demineralizer columns at the nearby water treatment facility. Successive discharges of acidic and caustic wastes were used to treat the wastes to a neutral condition. Any acidic or caustic wastes reaching the soil were presumed neutralized by the calcareous soil of the area. The ponds currently receive only nondangerous liquid effluent from operations at the 183-D Filter Water Plant. These discharges consist of sand filter water backwash and raw water discharge from the process water basins. The facility is identified as a waste treatment unit and surface impoundment in the Part A permit application.

1.2 105-DR SODIUM FIRE FACILITY

The 105-DR Sodium Fire Facility is located in the 100-D Area of the Hanford Site. The facility was used to treat alkali metal waste materials and perform tests to study the behavior of molten alkali metals and alkali metal fires. The facility was also permitted to store up to 20,000 L of dangerous waste, although facility personnel indicated that the facility has not been used to store dangerous waste. The facility is no longer used to treat dangerous waste or perform alkali metal tests; however, waste residues remaining from past operations have not been removed from the facility. The facility is identified as a waste treatment unit and container storage facility in the Part A permit application.

1.3 183-H SOLAR EVAPORATION BASINS

The 183-H Solar Evaporation Basins consist of four concrete basins originally constructed to treat process water for past 100-H Area operations. The basins were designated for use as dangerous waste solar evaporation basins in 1973 and were used to treat and store radioactive dangerous waste generated from N Reactor fuel fabrication operations of the 300 Area. Although the basins have not received waste since November 1985, the waste was not removed from the facility at that time. The solid waste has since been removed from the basins. Basins 2 and 3, which have been fitted with hypalon liners to improve the integrity of the structures, contain the remaining liquid waste. The facility is currently undergoing active closure through which all the waste and waste residue will be removed. A Part A permit application for tank storage and treatment has been submitted for the facility.

1.4 1706-KE TREATMENT AND STORAGE FACILITY

The 1706-KE Treatment and Storage Facility or the Integrated Volume Reduction System was a system designed for volume reduction and solidification of radioactive waste water generated at various

1706-KE Building test activities in the 100-KE Area. The system, in general, consisted of a storage tank, hot epoxy evaporator, condenser, and condensate receiving tank. Waste from the receiving storage tank was anticipated to be fed into a drum of hot epoxy. The waste water would then flash to steam, leaving the solids behind, trapped in the epoxy. The steam would then be condensed and accumulated in the receiving tank. The facility is identified as a waste treatment unit and tank storage facility in the Part A permit application.

Facility personnel indicated that, due to numerous operational problems, the system was never operated to treat or store dangerous waste. Efforts are currently underway to request withdrawal of the Part A permit application. However, because the permit application has not officially been withdrawn at this time, for the purposes of this assessment, the facility will be assessed as an interim status facility.

1.5 200 WEST ASH PIT

The 200 West Ash Pit is a small area in a 200 West Area excavation pit that was used to detonate shock-sensitive and potentially explosive chemical wastes. The wastes were detonated directly on the soil of the excavation area. The site is no longer used for detonation of unstable chemical wastes. The facility is identified as "other treatment" in the Part A permit application.

1.6 216-S-10 POND AND DITCH

The 216-S-10 Pond and Ditch are an unlined trench and pond located south of the 200 West Area of the Hanford Site. The facility was used for disposal through percolation into the soil column of Chemical Engineering Laboratory wastes from 1980 to 1983 which included dangerous waste in the form of simulated double-shell tank slurry. The pond has since been decommissioned and is no longer used for waste receipt of any kind. The 216-S-10 Ditch continues to receive a nondangerous liquid discharge consisting of water tower overflow and cooling water from the 202-S facility operations. The ditch recently received nondangerous liquid discharge from the 222-S Laboratory via the facility's 207-SL Retention Basin. Facility personnel indicated that the ditch will be used again in the near future to receive nondangerous liquid discharges from the 207-SL Retention Basin. The pond and ditch are identified as a surface impoundment in the Part A permit application.

1.7 216-U-12 CRIB

The 216-U-12 Crib is an underground liquid percolation facility in the 200 West Area. The crib was used in the past to dispose of process condensate waste from the UO₃ Plant. The waste was piped to the crib which percolated the liquid into the ground. The process condensate consisted primarily of a dilute aqueous solution contaminated with low levels of nitric

acid and radioactive and nonradioactive constituents. Process modifications at UO₃ Plant brought the pH of the waste stream above 2.0 after January 1987. The crib has not received any waste since January 1988 when the crib line was blanked off from the plant. The facility is identified as a landfill in the Part A permit application.

Since of the time frame the facility was used to dispose of waste and the effective date of regulation for mixed waste, the facility is a candidate for withdrawal of the Part A permit application. However, because the permit application has not officially been withdrawn at this time, for the purposes of this assessment, the facility will be assessed as an interim status facility.

1.8 2101-M POND

The 2101-M Pond is a small unlined pond in the 200 East Area of the Hanford Site. The pond received waste from the 2101-M Laboratory Facility but has not received dangerous waste since July 1985. The pond continues to receive nondangerous discharges in the form of condensate from the facility heating and ventilation system, overflow from the facility swamp coolers, and precipitation run-off from nearby parking lots and roads.

Administrative controls and physical barriers are being established to prevent dangerous waste discharges to the pond during future laboratory operations. The facility is identified as a surface impoundment in the Part A permit application.

1.9 2727-S STORAGE FACILITY

The 2727-S Storage Facility, located in the 200 West Area, was used for containerized storage of nonradioactive dangerous waste generated on the Hanford Site. All the waste has been removed from the facility which is no longer used in any capacity. The facility is identified as a container storage area in the Part A permit application.

1.10 300 AREA SOLVENT EVAPORATOR

The 300 Area Solvent Evaporator was a Brooks Load Luger Tank with steam heating coils on the side. It was used to evaporate both radioactive and noncontaminated spent solvents generated in the fuels fabrication processes of the 300 Area. The unit last operated in November 1985 and has since been decommissioned and disposed of in the 200 West Area Low Level Burial Grounds. The facility is identified as a tank treatment unit in the Part A permit application.

1.11 304 CONCRETION FACILITY

The 304 Concretion Facility was used to treat ignitable mixed waste produced during fuel fabrication operations in the 300 Area of the Hanford Site. These wastes consisted of beryllium-zircalloy-2 chips, zircalloy-2 chips and fines, slightly enriched uranium and zircalloy-2 chips and fines, and depleted uranium-titanium alloy chips and fines. The waste was concreted into 30- and 55-gal DOT 17-H drums using cement to eliminate the waste ignitibility hazard. The facility no longer operates as a waste treatment or storage facility and will be closed under interim status. The facility has not managed dangerous waste since September 1988.

1.12 E-8 BORROW PIT

The 218-E-8 Borrow Pit is the location identified in the existing Part A permit application where demolition similar to that described at the 200 West Ash Pit occurred. However, discussions with facility personnel indicated that detonation did not occur at the 218-E-8 Borrow Pit, but in the 200 East Area Tank Farms above ground storage area. The 200 East Area Tank Farms above ground storage area is assessed in this report. However, for simplicity and consistency with other documentation, the detonation area will be referred to as the E-8 Borrow Pit. The wastes were detonated directly on the soil in a large excavated area. The site is no longer used for detonation of unstable chemical wastes. The facility is identified as "other treatment" in the Part A permit application.

1.13 HEXONE TANKS

The Hexone Tanks Facility consists of two single-walled underground carbon steel tanks (276-S-141 and 276-S-142) in the 200 West Area of the Hanford Site. The tanks received radioactive mixed waste from the REDOX facility and the Hot Semiworks facility. Tank 276-S-141 contains waste hexone and Tank 276-S-142 contains a mixture of waste hexone (60%), tributyl phosphate (19%), and normal paraffin hydrocarbons. The total volume of waste in both tanks is approximately 36,000 gal. No waste has been added to the tanks since the late 1960's. Although the tanks are not known to be leaking at this time, due to uncertainty of the tanks integrity, plans are being made to close the facility by removing and treating the waste and removing the empty tanks from the ground. The facility is identified as a tank storage facility in the Part A permit application.

The Part A permit application also identifies treatment and storage activities which will be implemented during remediation of the underground tanks. These future activities are not within the scope of this assessment. However, compliance with all applicable regulations is being pursued for the remediation waste treatment and storage units prior to beginning the project.

2.0 GENERAL REQUIREMENTS (WAC 173-303-280)

2.1 REGULATIONS AND REQUIREMENTS

2.1.1 General Requirements

The general requirements for dangerous waste treatment, storage, and disposal (TSD) facilities note two specific requirements.

- o The facility must be operated in a manner which does not present an imminent or substantial hazard to the public health or the environment.
- o The facility is required to apply for a U.S. Environmental Protection Agency (EPA)/state identification number from the regulatory agency.

The requirement to operate the facility in a manner which does not threaten human health or the environment is deliberately general so that the agencies can use the requirement as a broad enforcement tool. If other, more specific regulations can not be applied to a situation where the agency feels a threat exists, this general facility requirement can be used. This requirement is satisfied primarily by preventing or minimizing activities which have the potential to expose the public or the environment to dangerous wastes.

2.1.2 Identification Number

The TSD facility EPA/state identification number is obtained by completing a Washington State notification of dangerous waste activities form and submitting the form to the Washington State Department of Ecology (Ecology). The information requested on the form includes the following.

- o Name and address of the party handling the dangerous waste.
- o Type of dangerous waste activities.
- o Contact persons at the facility.
- o Identification of dangerous wastes handled at the facility.
- o Estimated quantity of dangerous wastes handled.

The identification number is used on the annual reports that a TSD facility must submit each year and on manifests which a facility may use to transfer wastes offsite.

2.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application and must therefore satisfy the general requirements for dangerous waste management facilities.

2.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

2.3.1 100-D Ponds

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 100-D Ponds.

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The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; however, because the facility managed dangerous waste in the past and continues to receive a nondangerous liquid discharge, it should be documented that present activities do not pose a threat to human health or the environment.

Action: o Provide documentation ensuring proper management of waste stream. This can be included in the development of the facility waste analysis plan.

2.3.2 105-DR Sodium Fire Facility

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The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 105-DR Sodium Fire Facility.

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Although the facility does not presently manage dangerous waste as a treatment, storage, or disposal facility, significant quantities of waste residue remain from past operations. The facility does not appear to pose a threat to human health or the environment under its current status.

Action: o None.

2.3.3 183-H Solar Evaporation Basins

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 183-H Solar Evaporation Basins.

The 183-H Solar Evaporation Basins are used to store dangerous waste remaining from past operations and must be operated in an environmentally sound manner; however, the facility is actively undergoing closure through

which all the remaining dangerous waste will be removed. Therefore, assessment of the current operations' compliance with the requirement to operate in a manner not posing a threat to the public health or the environment would provide no useful information because the decision has already been made to remove the facility from service.

Action: o None.

2.3.4 1706-KE Treatment and Storage Facility

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 1706-KE Treatment and Storage Facility.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting a threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.5 200 West Ash Pit

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 200 West Ash Pit.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting an imminent or substantial threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.6 216-S-10 Pond and Ditch

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 216-S-10 Pond and Ditch.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; however, because the facility has managed dangerous waste in the past and continues to receive a nondangerous liquid discharge, it should be documented that present activities do not pose a threat to human health or the environment.

Action: o Provide documentation ensuring proper management of waste stream. This can be included in the development of the facility waste analysis plan.

2.3.7 216-U-12 Crib

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 216-U-12 Crib.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility and does not appear to be operated in a manner presenting an imminent or substantial threat to the public health or the environment from the standpoint of dangerous waste management.

7 Action: o None.

2.3.8 2101-M Pond

9 The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 2101-M Pond.

5 The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting an imminent or substantial threat to the public health or the environment from the standpoint of dangerous waste management. The pond does continue to receive nondangerous liquid wastes; however, soil characterization performed supporting closure of the pond indicate that continued nondangerous liquid discharge to the pond will not threaten human health or the environment.

2 Action: o None.

2.3.9 2727-S Storage Facility

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 2727-S Storage Facility.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting an imminent or substantial threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.10 300 Area Solvent Evaporator

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 300 Area Solvent Evaporator.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting an imminent or substantial threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.11 304 Concretion Facility

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the 304 Concretion Facility.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting a threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.12 E-8 Borrow Pit

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the E-8 Borrow Pit.

The facility does not presently manage dangerous waste as a treatment, storage, or disposal facility; consequently, it can not be said to be operated in a manner presenting a threat to the public health or the environment from the standpoint of dangerous waste management.

Action: o None.

2.3.13 Hexone Tanks

The Hanford Site is a single site and has received one EPA/state identification number applicable to all activities on the site; therefore, the Hanford Site EPA/state identification number applies to the hexone tanks.

The hexone tanks store dangerous waste remaining from past operations and must be operated in an environmentally sound manner. However, the facility is actively undergoing closure through which all the remaining dangerous waste will be removed. Therefore, assessment of the current operations' compliance with the requirement to operate in a manner not posing a threat to the public health or the environment would be superfluous.

Action: o None.

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3.0 NOTICE OF INTENT (WAC 173-303-281)

3.1 REGULATIONS AND REQUIREMENTS

The purpose of this section is to ensure notification to the regulatory agencies, local communities, and public, that siting of a dangerous waste management facility is being considered. The notice of intent must include the following.

- o The name, address, and telephone number of the owner/operator.
- o The location of the proposed facility.
- o A brief description of the types and amounts of waste to be managed annually.
- o A brief description of the major equipment items proposed and the waste management activities requiring a permit.
- o An environmental checklist from the State Environmental Policy Act rules.
- o Documentation of the facility's compliance with the siting standards.
- o A summary of the compliance violations of other waste management facilities owned by the applicant.
- o Demonstration of the need for the proposed facility.
- o Documentation of how the proposed facility will affect the overall capacity within the State.

3.2 APPLICABILITY

This section applies to owners and operators of proposed facilities or facilities for which expansion is proposed. All of the subject facilities are existing and expansions are not proposed for any; therefore, the requirements of this section are not applicable.

3.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

The requirements of this section are not applicable to any of the subject facilities; therefore, no recommended corrective actions are provided.

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4.0 PERFORMANCE STANDARDS (WAC 173-303-283)

4.1 REGULATIONS AND REQUIREMENTS

The general performance standards allow for the regulatory agencies to apply, on a case by case basis, standards that are more stringent than those specifically presented in the regulations. The general performance standards require that dangerous waste TSD facilities must be designed, constructed, and maintained in a manner that prevents degradation of human health or the environment. Specific areas of environmental damage noted in the regulations include:

- o Groundwater and surfacewater quality
- o Air quality
- o Slope and soil instability
- o Flora and fauna
- o Aesthetics of public or adjoining lands
- o Excessive noise.

The general performance standards also require that the facility treat or recycle waste material as much as economically feasible.

In essence, the general performance standards allow the regulatory agency to control the operations at a TSD facility even if no specific regulation (other than the general performance standards) is being violated. By citing the general performance standards and identifying a "threat to human health or the environment," the agency can undertake enforcement action to correct the source of the threat. Thus, the general performance standards require that, above all else, the owner/operator identify facility-specific practices that, although may not fail any specific TSD requirement, could present a threat to human health or the environment.

4.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the performance standard requirements of this section are applicable.

4.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

4.3.1 100-D Ponds

The 100-D Ponds do not actively manage dangerous waste; however, the facility has not been closed and continues to receive a nondangerous liquid discharge. It is questionable whether present operations are in accordance with the performance standards.

Action: o Provide documentation ensuring proper management of waste stream. This can be included in the development of the facility waste analysis plan.

4.3.2 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.3 183-H Solar Evaporation Basins

The facility appears to be operated in general accordance with the requirements of this section. Closure of the basins including removal of the waste is scheduled to minimize the threat to the environment.

Action: o None.

4.3.4 1706-KE Treatment and Storage Facility

The 1706-KE Treatment and Storage Facility presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.5 200 West Ash Pit

The 200 West Ash Pit presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.6 216-S-10 Pond and Ditch

The 216-S-10 Pond and Ditch do not actively manage dangerous waste; however, the facility has not been closed and continues to receive a nondangerous liquid discharge. It is questionable whether present operations are in accordance with the performance standards.

Action: o Provide documentation ensuring proper management of waste stream. This can be included in the development of the facility waste analysis plan.

4.3.7 216-U-12 Crib

The 216-U-12 Crib presently does not operate in any capacity and appears to be in general accordance with the performance standards.

3 Action: o None.

4.3.8 2101-M Pond

6 The 2101-M Pond does not actively manage dangerous waste and appears to be in general accordance with the performance standards under present operations. Although the facility continues to receive nonregulated liquid discharges from the nearby 2101-M Laboratory and Training Facility, characterization studies to date supporting closure of the facility suggest that the constituents in the soil and groundwater are present in concentrations that do not pose a substantial threat to the environment or human health.

2 Action: o None.

2 4.3.9 2727-S Storage Facility

9 The 2727-S Storage Facility presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.10 300 Area Solvent Evaporator

The 300 Area Solvent Evaporator presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.11 304 Concretion Facility

The 304 Concretion Facility presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.12 E-8 Borrow Pit

The E-8 Borrow Pit presently does not operate in any capacity and appears to be in general accordance with the performance standards.

Action: o None.

4.3.13 Hexone Tanks

The facility appears to be operated in general accordance with the requirements of this section. Closure of the tanks, including removal of the waste and the tanks themselves, is scheduled to minimize the threat to the environment from the hexone.

Action: o None.

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5.0 REQUIRED NOTICES (WAC 173-303-290)

5.1 REGULATIONS AND REQUIREMENTS

There are three specific types of notices required of TSD dangerous waste facilities.

- o Ecology must be notified at least four weeks prior to the TSD facility receiving dangerous waste from a source outside of the United States.
- o The owner/operator of the TSD facility is required to notify any new owner/operator of the dangerous waste regulations, Washington Administrative Code (WAC) 173-303.
- o The TSD facility owner/operator must inform any generator of dangerous waste shipping waste to the TSD facility that the facility has the appropriate permits to receive the wastes.

5.2 APPLICABILITY

None of the subject TSD facilities receive dangerous waste from offsite or foreign sources, ship dangerous waste from the Hanford Site, or are planned for ownership transfer; thus, notification requirements are not applicable.

5.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

The requirements of this section are not applicable to any of the subject facilities; therefore, no recommended corrective actions are provided.

6.0 GENERAL WASTE ANALYSIS (WAC 173-303-300)

6.1 REGULATIONS AND REQUIREMENTS

6.1.1 Waste Analyses Requirements

The waste analysis requirements assures that the TSD facility has sufficient understanding of the dangerous wastes to properly treat, store, or dispose of them. The waste analysis requirements include the following.

- o The owner/operator must obtain a detailed chemical, physical, and/or biological analysis of the wastes prior to its management. The analysis must provide the parameters necessary to assure that the material is properly handled. An understanding of the facility processes may be used as an alternative to testing if such knowledge is sufficient to meet the intent of the waste analyses requirements.
- o The wastes must be reexamined if the wastes or the processes generating the wastes change.
- o A written waste analysis plan is required which presents the specific parameters that the waste will be analyzed for, the rationale for selecting the parameters, sampling and test methods, and the frequency with which the initial waste analysis will be reviewed or repeated. The plan must be maintained in the facility operating record.
- o If wastes are received from offsite, procedures are required to ensure that the wastes received are as anticipated. (Since most of the Hanford Site does not receive wastes from offsite, this requirement is not applicable for most Hanford Site facilities.)

The waste analysis requirement is an important step toward effective and safe waste-handling procedures. The waste analysis requirements is not simply a recordkeeping system for analytical data. The facility operator must carefully examine the precise function and nature of the TSD operations to formulate a suitable wastes analysis program.

Waste analysis is necessary for a proper closure plan. An understanding of the wastes is necessary to determine effective methods to remove and/or treat the dangerous wastes and to decontaminate the facility. Similar requirements exist for postclosure and groundwater monitoring activities.

6.1.2 Content of the Waste Analyses Plan

6.1.2.1 Process Control and Monitoring. The waste analysis plan must consider the wastes at all stages of the TSD processes where the wastes may differ from one stage to another. For example, a dangerous waste being treated in a tank should be analyzed before and after the treatment process. It should be analyzed prior to the process to ensure that the treatment is appropriate for the waste and does not result in a reactive or otherwise dangerous situation. The waste analysis should be accomplished after the treatment to ensure that the process is successful in effectively treating the waste.

The waste analysis plan must also identify tolerances that the wastes must meet in terms of specific parameters (i.e., measurable chemical or physical properties). The plan must show how the wastes are monitored to ensure that the specific tolerances are met. For example, a treatment tank that is designed to receive dangerous waste with a pH of 8.0, and the pH is boosted to 12.0. The waste analysis plan must note the range of pH around the 8.0 and 12.0 target values. The plan must describe in detail how, when, and where the waste will be sampled and tested to ensure that the pH of the incoming and outgoing waste falls within the specified ranges.

6.1.2.2 Material Compatibility. The waste analysis plan must show the compatibility between the wastes and all materials that come in contact with the wastes. For example, the compatibility between the wastes and any tank materials, container materials, synthetic liner materials, secondary containment materials, etc. must be documented as a result of the waste analysis program.

6.1.2.3 Representative Sampling. The waste analysis plan must note specifically how representative samples of the wastes will be obtained. Information that must be provided includes:

- o Methods to ensure that the samples properly represent the range of the characteristics of the wastes
- o Sampling techniques
- o Sampling equipment.

6.1.2.4 Quality Assurance and Quality Control. The waste analysis plan must detail the quality assurance/quality control (QA/QC) program that ensures that all of the waste analysis information is technically defensible and properly documented. The QA/QC program should address the following.

- o The number of samples and sample blanks required for statistical completeness.
- o Preparation, maintenance, and cleaning of containers and equipment.
- o Certification of any laboratories used.

- o Chain-of-custody procedures and proper sample handling.
- o Laboratory testing methods approved by the EPA or state regulatory agency and justifications if nonapproved methods are used.
- o Health and safety protocols.
- o Proper methods of data compilation, review, and presentation.

6.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the waste analysis requirements of this section are applicable. However, many of these facilities do not actively manage waste; hence a dangerous waste analysis plan is not required to ensure the safe and proper management at all the subject facilities. However, a waste analysis plan will be required to support closure activities at each facility.

6.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

6.3.1 100-D Ponds

Although the 100-D Ponds are not presently used as dangerous waste management facilities, they receive, based on current knowledge, nondangerous liquid discharges. A waste analysis plan is needed to ensure knowledge of the current waste characteristics, since a Part A permit application has been submitted for dangerous waste discharge, and since the ponds receive a routine, although nondangerous, waste discharge from present operations.

The liquid discharge to the 100-D Ponds has been sampled on four occasions under-worst case conditions (i.e., during filter backwash) according to a written plan. While the document meets many of the waste analysis requirements, and may provide valuable data supporting analysis of the stream, it does not constitute a waste analysis plan specific to the 100-D ponds discharge. The ponds may also receive discharges of 100-D Laboratory waste water. The waste analysis program should include all sources of discharge to the ponds, consider discharges to the ponds under all relevant operating conditions, and should document proper management of the current waste stream.

- Action:
- o Determine adequacy of existing characterization data for 100-D Ponds discharges.
 - o Prepare a waste analysis plan for the current discharges to the pond, or modify the existing sampling/analysis plan. Include rationale for adequate designation and proper waste management.

6.3.2 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility is no longer used in any capacity; however, significant quantities of residue resulting from past operations remain at the facility. Facility personnel indicated that some limited characterization work has been performed on the remaining residue; however, this was not pursuant to a structured waste analysis plan. Since the facility is not currently operating as a dangerous waste management facility and no longer receives waste in any form, a dangerous waste analysis plan is not recommended. However, characterization of remaining residues will be required to support closure of the facility.

Action: o None.

6.3.3 183-H Solar Evaporation Basins

The 183-H Solar Evaporation Basins currently store and treat dangerous waste; however, because no additional waste will be received at the facility, a detailed waste analysis plan to ensure knowledge of the dangerous waste characteristics of a potentially unconstant waste stream is not recommended. Knowledge of the characteristics of the existing waste and its compatibility with the facility is required. While operating, waste shipments to the facility were analyzed for various constituents and after closure for waste receipt, the remaining waste was sampled and analyzed extensively. Detailed characterization data is contained in the draft plan for closure of the facility including information on sampling techniques, laboratory results, and waste designation. This information appears to provide adequate knowledge of the waste characteristics to ensure proper management of the waste. Waste characterization supporting closure of the facility is not within the scope of this assessment.

Action: o None.

6.3.4 1706-KE Waste Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis program is required to ensure the safe and proper management of the facility.

Action: o None.

6.3.5 200 West Ash Pit

Since the 200 West Ash Pit does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis program is required to ensure the safe and proper management of the facility. A plan for soil

characterization may be required prior to closure of the facility and if so, should be pursued as part of the facility closure plan.

Action: o None.

6.3.6 216-S-10 Pond and Ditch

The 216-S-10 Pond and Ditch routinely receive nondangerous liquid discharges from the 202-S Facility's water tower overflow and process cooling systems. The facility also recently received nondangerous liquid waste from the 222-S Chemical Laboratory facility via the 207-SL Retention Basin and is anticipated to continue receiving waste from the basin in the future. The 207-SL Retention Basin contents consist primarily of process cooling water and condensate and sink drainage from the laboratory. The 202-S liquid discharges are not analyzed prior to discharge to the ditch. The 207-SL retention water is sampled and analyzed prior to each release. Administrative controls are in place ensuring that only nondangerous wastes are placed in laboratory sinks.

The liquid discharge from the 207-SL Retention Basin and the 202-S Facility have each been sampled and analyzed on four occasions according to a written plan. Analysis data from these samples is contained in the report. It is not clear whether the streams were sampled under all operating conditions. While this document meets many of the waste analysis requirements and may provide valuable data supporting analysis of the stream, it does not constitute a waste analysis plan specific to the 216-S-10 Pond and Ditch.

Waste analysis documentation, which includes a sample schedule, sampling methods, the parameters determined, and the methods used to analyze the waste is in place. Presently, total alpha, total beta, and pH are the only constituents analyzed for prior to discharge from the 207-SL Retention Basin. While it is possible that the knowledge gained from current analyzing practices prior to discharge, coupled with process knowledge and past analytical data, may adequately designate the stream prior to discharge, the rationale to ensure adequate designation is not in place.

Action: o Determine adequacy of existing characterization data for 216-S-10 Ditch discharges.

 o Develop waste analysis plan, including a rationale for adequate designation of waste streams discharged to the 216-S-10 Ditch, or modify the existing sampling/analysis plan. The plan should include all discharges to the facility and should include documentation supporting proper management of the waste.

6.3.7 216-U-12 Crib

Since the 216-U-12 Crib does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis program is required to ensure the safe and proper management of the facility. A plan for characterization of any remaining waste residues or contaminated soils may be required prior to closure of the facility and if so, should be pursued as part of the facility closure plan.

Action: o None.

6.3.8 2101-M Pond

Although the 2101-M Pond is no longer used to dispose dangerous waste, it continues to receive nondangerous discharges from the 2101-M Laboratory and Training Facility. Administrative controls are required of each laboratory occupant to ensure no dangerous waste is disposed to the pond. Rooms where dangerous waste is generated or handled are required to have physical controls in place to prevent disposal of hazardous chemicals to the pond. Since the pond receives a routine, although anticipated nondangerous, waste discharge from present operations, a waste analysis plan is needed to ensure knowledge of current and future waste characteristics and document proper management of the waste stream.

The liquid discharge has been sampled on at least four occasions as part of a characterization study of the Hanford Site liquid discharges to the ground. Analysis of these samples provides confirmation that the discharges to the ponds are nondangerous. While this document meets many of the requirements of a waste analysis plan, and may provide valuable data supporting characterization of the stream, it does not constitute a waste analysis plan specific to the 2101-M Pond. The waste analysis program should include all sources of discharge to the ponds, consider discharges to the ponds under all relevant operating conditions, and should document proper management of the current waste stream.

Action: o Prepare a waste analysis plan specific to the 2101-M Pond and the current discharges, or modify the existing sampling/analysis plan.

6.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis is required to ensure the safe and proper management of the facility. A plan for analysis of remaining structures may be required prior to closure of the facility and, if so, should be pursued as part of the facility closure plan.

Action: o None.

6.3.10 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis is required to ensure the safe and proper management of the facility. A plan for soil characterization to detect remaining waste residues is being pursued as part of the facility closure plan.

Action: o None.

6.3.11 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis is required to ensure the safe and proper management of the facility. A plan for analysis of remaining structures may be required prior to closure of the facility and, if so, should be pursued as part of the facility closure plan.

Action: o None.

6.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit does not actively manage waste (dangerous or nondangerous), no dangerous waste analysis is required to ensure the safe and proper management of the facility. A plan for soil characterization may be required prior to closure of the facility and should be pursued as part of the facility closure plan.

Action: o None.

6.3.13 Hexone Tanks

The Hexone tanks actively store dangerous waste remaining from past operations but no longer receive waste in any form. Since the facility no longer receives waste, a detailed waste analysis plan to ensure knowledge of the dangerous waste characteristics of a potentially inconstant waste stream is not recommended. Waste designation data is documented in the existing remediation plan for the tanks and appears to be adequate to ensure proper management of the waste material; however, no waste analysis plan was available indicating the rational or adequacy of past characterization work. Extensive characterization of the waste will be required prior to closure of the facility and should be pursued as part of the facility closure plan.

Action: o Determine adequacy of past waste analysis documentation.

 o Prepare waste analysis plan which indicates the rational for the waste analysis performed, sampling methods, and the methods used to perform waste analysis.

7.0 SECURITY (WAC 173-303-310)

7.1 REGULATIONS AND REQUIREMENTS

7.1.1 Securing the Active Portion

All TSD facilities must have sufficient security to prevent unknowing entry and to minimize unauthorized entry of people and/or animals to the active portions of the facility. The active portion of a facility is considered the dangerous waste management unit such as a specific tank, container area, or landfill unit within the facility. Transfer areas such as loading and unloading docks are also considered an active portion of the facility. The specific features required of the security system include:

- o Signs around the active portions of the facility
- o A 24-h surveillance system
- o Artificial or natural barriers with controlled access.

7.1.2 Signs

The signs around the active portions of the facility are required to satisfy the following requirements.

- o The sign must clearly note the danger associated with the TSD unit and that unauthorized people are not allowed. At a minimum, the sign must read "Danger--Unauthorized Personnel Keep Out."
- o The sign must be legible from a distance of at least 25 ft.
- o A sufficient number of signs must be placed around the active portion of the facility so that a sign is visible from any approach.
- o The sign must be in English as well as any other language predominant in the area around the TSD facility.

7.1.3 Surveillance

A 24-h surveillance system should immediately identify any attempted or inadvertent entry into the active portion of the facility. Continuously monitored closed-circuit TV systems and 24-h guard service are typical types of 24-h surveillance systems.

Artificial or natural barriers with controlled access points can also provide security. Artificial barriers are considered to items such as 6-ft or higher locking fences with gates, and building enclosures. Natural

barriers include rivers, lakes, and steep hillsides. Controlled access points are points where entry and exit to the facility is closely controlled and include locking or continuously patrolled gates or doors.

7.2 APPLICABILITY

The subject units have been identified as TSD units in Part A permit applications; therefore, security requirements apply to each of the units.

7.3 CURRENT STATUS AND RECOMMENDATIONS FOR CORRECTIVE ACTION

7.3.1 100-D Ponds

Although general public access to the unit is controlled by general Hanford Site security, no means of preventing unauthorized access of Hanford Site employees exists.

Action: o A barrier should be erected around the ponds and signs visible from all approaches reading "Danger--Unauthorized Personnel Keep Out" or an equivalent message should be posted to control access.

7.3.2 105-DR Sodium Fire Facility

Access to the 105-DR Sodium Fire Facility is controlled by Hanford Site security, locked doors, and signs indicating restricted access. All doors leading to the facility are locked at all times. A sign reading "Danger--Unauthorized Personnel Keep Out" is posted on the main entrance.

Action: o "Danger--Unauthorized Personnel Keep Out" signs should be posted in sufficient numbers to be visible from all approaches to the sodium fire facility portion of the building.

7.3.3 183-H Solar Evaporation Basins

Access to the 183-H Solar Evaporation Basins is controlled by Hanford Site security and facility-specific security. The latter security consists of a chain link fence topped with barbed wire that surrounds the facility, a locking gate, and adequate signs indicating entrance restrictions. The gate to the fence is locked at all times when facility personnel are not present.

Action: o None.

7.3.4 1706-KE Treatment and Storage Facility

The 1706-KE Treatment and Storage Facility is located within a radiation zone. The facility cannot be entered without passing through a posted radiation zone barrier. Doors leading to the facility are locked when not in use. These measures, combined with Hanford Site security and 100-KE Area security, adequately control access to the facility.

Action: o None.

7.3.5 200 West Ash Pit

No control of access is in place at the 200 West Area Ash Pit other than Hanford Site security and signs indicating waste dumping restrictions.

Action: o To prevent molestation of the site prior to closure, access to the facility should be controlled with a continuous barrier and signs indicating access restrictions.

7.3.6 216-S-10 Pond and Ditch

Access to the 216-S-10 Ditch is controlled by Hanford Site security, radiation signs, posts, and a single chain. The posts, chain, and signs surrounding the ditch were in poor condition and were lying on the ground in many places. The 216-S-10 Pond has been decommissioned and is no longer used. Access to the pond is adequately controlled by radiation posting and a soil barrier over the facility resulting from the decommissioning activities.

Action: o Repair posts, signs, and chain surrounding ditch to provide a continuous barrier controlling access.

7.3.7 216-U-12 Crib

Access to the 216-U-12 Crib is controlled by posts with a single chain surrounding the area and numerous radiation signs visible from all approaches to the facility.

Action: o None.

7.3.8 2101-M Pond

Access to the 2101-M Pond is controlled by Hanford Site security, 200 East Area security, and a single chain barrier around the pond boundaries. No signs restricting access to the pond were in place.

Action: o Post restrictive access signs visible from all directions of access to the pond.

7.3.9 2727-S Storage Facility

Access is controlled to the 2727-S Storage Facility by Hanford Site security, posts, a single chain, and signs indicating access restriction. The chain was on the ground in several places.

Action: o Repair chain barrier surrounding 2727-S Storage Facility.

7.3.10 300 Area Solvent Evaporator

Access is adequately controlled to the area used for operation of the 300 Area Solvent Evaporator by Hanford Site security, a chain surrounding the area, and "Danger--Keep Out" signs visible from all approaches to the unit.

Action: o None.

7.3.11 304 Concretion Facility

The security measures in place at the 304 Concretion Facility with Hanford Site security adequately control access to the building and storage pad. The doors to the building and the gate entrance to the pad are locked when not in use; signs restricting access are posted at each entrance to the facility; and a 6 ft fence surrounds the container storage pad.

Action: o None.

7.3.12 E-8 Borrow Pit

Control of access in place at the E-8 Borrow Pit consists of Hanford Site security and signs indicating waste dumping restrictions. No access control is in place to prevent intrusion of 200 East Area employees.

Action: o To prevent molestation of the site prior to closure, access to the facility should be established with a continuous barrier and signs indicating access restrictions.

7.3.13 Hexone Tanks

Access to the hexone tanks is controlled by Hanford Site security, a chain link fence with locked gate, and numerous signs restricting access. The fence gate is locked when no facility personnel are present. The security measures controlling access to the facility is adequate.

Action: o None.

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8.0 GENERAL INSPECTION (WAC 173-303-320)

8.1 REGULATIONS AND REQUIREMENTS

8.1.1 Inspection Program

Facilities which treat, store, or dispose dangerous wastes must develop and implement a detailed inspection program. A written inspection plan must be developed and maintained in the facility operating records, and must address both general and unit-specific inspection requirements. The general inspection requirements refer to inspection of the portions of the TSD facility other than the actual TSD units (container, tank, landfill, etc.).

Unit-specific inspection requirements are presented as part of the individual requirements (container, tank, landfill, etc.).

The general facility inspection program must consider the following items.

- o Safety equipment such as emergency eye wash stations, protective shields, first aid equipment, and respirators.
- o Emergency equipment such as spill-control supplies, fire extinguishers, emergency lights, generators, and fire alarms.
- o Monitoring equipment such as thermostats, fire detection equipment, level, pressure, and flow transducers.
- o Security equipment such as fences, signs, lights, and locks.
- o Communication equipment such as radios, intercoms, closed-circuit TV systems, and public address systems.
- o Other general facility items such as building floors, walls, roofs, elevators, ramps, and vehicles.

8.1.2 Detailed Inspection Plan

The inspection plan should note in great detail what specific items are to be inspected, when they are to be inspected, and what is to be checked for on each item. The level of detail required in an inspection plan is typically underestimated. It is not sufficient to simply "check the closed-circuit TV system," as an example. Rather, each of the cameras should be checked for clarity, mobility, and focusing. Each receiving unit should be checked for cleanliness, picture quality, and picture adjustments. The inspection should reflect all elements which are necessary for the proper functioning of the item.

8.1.2.1 Inspection Records. Records of the inspections must be maintained. At a minimum, the logs must note the following.

- o The date and time of the inspection.
- o The printed name and signature of the inspector.
- o Notations of the observations made.
- o The date and nature of any action required as a result of the inspection.

The inspection logs must be maintained in the facility operating records for at least 3 yr.

8.1.2.2 Checklists. Typically, checklists guide the inspection of particular items. The checklists should reflect the level of detail required of the inspections. The checklists should give specific guidance on what to check on each item, how to inspect it, and how to note any deficiencies. Commonly, the inspection checklists serve as the inspection log and include space to note any responses to problems observed during the inspection.

8.1.2.3 Frequency of Inspections. The frequency of the inspections depend on the specific nature and function of the item being inspected. Equipment which continuously prevents dangerous wastes from spilling or leaking should be inspected daily. Equipment which is used only in the case of an emergency, needs to be inspected monthly. In general, the more failure of a piece of equipment poses a threat to the environment or human health, and the more frequently the item is required to perform its function, the more often it should be inspected. Equipment which is inspected less often should be subjected to a more rigorous inspection.

8.1.2.4 Unit-Specific Inspections. Unit-specific inspection requirements are presented in the respective sections addressing landfills, tanks, and container requirements. Additional inspection requirements for facilities that handle ignitable or reactive dangerous wastes are discussed in the Other General Requirements section (Section 16.0).

8.2 APPLICABILITY

The subject facilities have been identified as TSD units in Part A permit applications; therefore, general inspection requirements apply to each of the facilities.

8.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTION

8.3.1 100-D Ponds

Inspections are performed at the 100-D Ponds each working day during the offshift. The inspection is used to ensure a safe level is maintained in the ponds and to detect any abnormal occurrences. The pond level is visually monitored although no level monitoring devices are in place. Documentation of the inspections are maintained in the facility operating records. No written inspection plan exists for inspection of the ponds, but a 100-D Area checklist/schedule is used by facility personnel to document daily inspections.

- Action:
- o An inspection plan should be developed which indicates the frequency and scope of the inspections. The scope of the inspections should be expanded to include the security measures when they are in place.
 - o The inspection records maintained should include the date and time of the inspection, the printed name and signature of the inspector, a notation of observations, and notations of any corrective actions performed at the facility as a result of inspection findings.

8.3.2 105-DR Sodium Fire Facility

Inspections are performed at the 105-DR Sodium Fire Facility on an irregular basis. Facility personnel indicated that the inspections monitor the general appearance of the facility, the security measures in place (i.e., doors, locks, signs), and fire extinguishers. No inspection plan or schedule is used.

- Action:
- o Develop an inspection plan and schedule which indicates the scope and frequency of the inspections. The scope of the inspections should include, at a minimum, doors and locks, signs restricting access, and emergency response equipment (including fire alarm, fire control equipment, safety eyewash, and communication devices).
 - o Develop an inspection checklist to log the inspections. The checklist should include at least the date and time of the inspection, the printed name and handwritten signature of the inspector, a notation of the observations, and the date and nature of any remedial actions.

8.3.3 183-H Solar Evaporation Basins

A weekly inspection of the facility is performed by the Decommissioning Operations supervisor using an inspection checklist. As indicated on the log sheet, the inspections include a surveillance of the condition of the structure of the facility including the signs, safety and emergency equipment present, and areas subject to spills. The log sheet also contains spaces for entering the date and time, comments, remedial actions, and the date of which remedial actions are performed. The inspection log does not indicate any inspection of the liquid level and does not specify the frequency of inspection. The inspection logs, when completed, are maintained in a centralized file. Monthly inspections of fire extinguishers are performed and logged on the extinguisher tags. Additional information regarding inspection of the facility are found in Section 23.0 of this report.

- Action:
- o Develop an inspection schedule (or revise existing inspection plan) which indicates the frequency and scope of the inspections. Areas subject to spills must be inspected daily when in use. Security devices such as the fence and locks should also be included in the inspection scope.

8.3.4 1706-KE Waste Treatment and Storage Facility

No dangerous waste inspections are performed at the 1706-KE Treatment and Storage Facility. Facility personnel indicated that inspections are performed monthly to ensure that radiation postings on surrounding access points are in place, although no inspection log or schedule is maintained. Since the facility does not actively manage dangerous waste, an inspection plan of limited scope is recommended. The inspections should be performed per a written inspection plan and schedule.

- Action:
- o An inspection plan should be developed which indicates the frequency and scope of the inspections. Expand the scope of the existing inspections to include the security equipment (doors, locks, etc.) and the integrity of the surrounding structures.
 - o A log should be maintained which includes (1) the date and time; (2) the printed name and signature of the inspector; (3) notations of any observations; and (4) descriptions of any actions performed resulting from inspection findings.

8.3.5 200 West Ash Pit

No dangerous waste inspections are currently performed at the 200 West Ash Pit by facility personnel; however, the area is inspected by Environmental Protection personnel on a quarterly basis. Present plans are to limit the frequency of the inspections to once per year. Based on the

lack of hazard associated with the facility, frequent inspections are not recommended, but inspections should be performed often enough to ensure security measures are in adequate condition. Although there is no inspection plan indicating the scope of the inspections, the Environmental Protection surveillance manual provided a schedule for inspecting the facility. Environmental Protection personnel indicated the scope of the inspection was limited to ensuring that no activities had been or are being performed on the site. Records of past inspections are maintained with Environmental Protection in the form a memo indicating any inspection findings.

- Action:
- o Develop an inspection procedure indicating the scope of the inspection. Include the security measures (i.e., posts, signs, barriers) in the inspections.
 - o Develop an inspection checklist/log system to properly document inspections. Logs must include the date and time of the inspection, the printed name and signature of the inspector, a notation of observations, and the date and nature of remedial actions.
 - o Determine rational for inspection frequency based upon rate of possible deterioration of security measures.

8.3.6 216-S-10 Pond and Ditch

Tank Farms Surveillance Operations currently monitors the water level of the 216-S-10 Pond and Ditch weekly although no procedure was located to indicate this practice. Tank farms personnel indicated that the general appearance of the facility, including the signs and fence, are also noted during the surveillance. Environmental Protection performs inspections of the 216-S-10 Pond and Ditch on a semiannual basis and indicated that the scope of the inspection would note the condition of the security devices and the general condition of the facility. Environmental Protection's surveillance manual did not specify a schedule for performing surveillances at this facility. Additional discussions of inspection requirements applicable to this facility are found in Section 23.0 of this report.

- Action:
- o A procedure specifically for inspecting the 216-S-10 Pond and Ditch should be prepared. The procedure should indicate the scope (i.e., water levels, signs, fences, subsidence, etc.) and frequency of the inspections.
 - o In addition to the date, inspector signature, and remarks included in the existing inspection log system, the specific time of the inspection, the hand written signature of the inspector, and the date and nature of remedial actions performed should be included.

8.3.7 216-U-12 Crib

Weekly surveillance are performed by Tank Farms Surveillance Operations to monitor the liquid level of the crib according to the instructions specified in a standard operating procedure. Although not specified in the surveillance procedure, Tank Farms personnel indicated that the general appearance of the facility and the facility signs and chain barrier are also noted during the inspection and that anything abnormal would be noted in the remarks section of the log sheets used to document surveillance at the crib. Environmental Protection performs a semiannual inspection of the facility and indicated that the scope of the inspection included the condition of the security devices and the general appearance of the facility. Records are maintained by Environmental Protection in the form of a memo indicating any findings of the surveillance.

- Action:
- o A procedure specifically for inspecting the 216-U-12 Crib should be prepared. The procedure should indicate the scope (i.e., well levels, signs, fences, subsidence, etc.) and frequency of the inspection.
 - o In addition to the date, inspector signature, and remarks included in the existing inspection log system, the specific time of the inspection, the hand written signature of the inspector, and the date and nature of remedial actions performed should be included.

8.3.8 2101-M Pond

Facility personnel do not currently perform dangerous waste inspections at the 2101-M Pond. Environmental Protection performs a semiannual surveillance of the 2101-M Pond and indicated that the scope of the inspection would include the security devices and the general condition of the facility although this was not found in a written inspection procedure. The Environmental Protection surveillance procedures indicated a schedule for performing the inspections and records of the inspections are maintained in the form of a memo indicating the findings and surveillance compliance inspection reports. Additional information of inspection requirements applicable to this facility are found in Section 24.0 of this report.

- Action:
- o Develop an inspection procedure indicating the scope and frequency of the inspections.
 - o Develop an inspection checklist/log system to properly document inspections. The logs must include the date and time of the inspection, the printed and hand written name of the inspector, notations of observations, and the date and nature of remedial actions.

8.3.9 2727-S Storage Facility

No inspections are currently being performed at the 2727-S Storage Facility; however, Environmental Protection personnel indicated they would be performing surveillances in the future on an annual or semiannual basis.

- Action:
- o Implement routine inspection program for the 2727-S Storage Facility which includes the condition of the signs, posts, and barrier.
 - o Determine rational for inspection frequency based upon rate of possible deterioration of security measures.

8.3.10 300 Area Solvent Evaporator

No formal inspections are currently performed at the 300 Area Solvent Evaporator. Since no waste is actively managed at the facility, a inspection program of limited scope is recommended. To ensure the security measures currently in place at the facility are in good condition and that no abnormal occurrences have occurred, the area should be inspected regularly.

- Action:
- o An inspection plan should be prepared which indicates the frequency and scope of the inspection.
 - o Records maintained should include the date and time of the inspection, the printed and handwritten name of the inspector, notations of observations, and notations and date of any corrective actions performed as a result of inspection findings.

8.3.11 304 Concretion Facility

No formal inspections are currently performed at the 304 Concretion Facility. Since no waste is actively managed at the facility, a inspection program of limited scope is recommended. To ensure the security measures and safety equipment currently in place at the facility are in good condition and that no abnormal occurrences have occurred, the area should be inspected regularly.

- Action:
- o An inspection plan should be prepared which indicates the frequency and scope of the inspection.
 - o Records maintained should include the date and time of the inspection, the printed and handwritten name of the inspector, notations of observations, and notations and date of any corrective actions performed as a result of inspection findings.

8.3.12 E-8 Borrow Pit

Dangerous waste inspections are not currently performed at the E-8 Borrow Pit by facility personnel. The E-8 Borrow Pit is inspected by Environmental Protection personnel on a quarterly basis; however, present plans are to limit the frequency of the inspections to once per year. Based on the lack of hazard associated with the facility, frequent inspections are not recommended; however, inspections should be performed often enough to ensure security measures are in adequate condition. Although there is no inspection plan indicating the scope of the inspections, the Environmental Protection surveillance manual provided a schedule for inspecting the facility. Environmental Protection personnel indicated the scope of the inspection was limited to ensuring that no activities had been or are being performed on the site. Records of past inspections are maintained with Environmental Protection in the form a memo indicating any inspection findings.

- Action:
- o Develop an inspection procedure indicating the scope of the inspection. Include the security measures (i.e., posts, signs, barriers) in the inspections.
 - o Develop an inspection checklist/log system to properly document inspections.
 - o Determine rational for inspection frequency based upon rate of possible deterioration of security measures.

8.3.13 Hexone Tanks

Inspections are performed three times per week (Monday, Wednesday, and Friday) to monitor the liquid level in each of the tanks according to a written procedure which indicates the frequency of the surveillance to be performed weekly, not three times per week as indicated. Although not specified in the procedure, Tank Farms Surveillance Operations personnel indicated that the general appearance of the facility is also noted during each surveillance and anything abnormal would be indicated in the remarks section of the log sheet used to document the surveillances. Additional requirements applicable to inspections of the hexone tanks are found in Section 22.0 of this report.

- Action:
- o A procedure specifically for inspecting the Hexone Tanks Facility should be prepared. The procedure should indicate the scope (i.e., tank levels, signs, fences, emergency response equipment, subsidence, etc.) and frequency of the inspection.
 - o In addition to the date, inspector signature, and remarks included in the existing inspection log system, the specific time of the inspection, the handwritten signature of the inspector, and the date and nature of remedial actions performed should be included.

9.0 PERSONNEL TRAINING (WAC 173-303-330)

9.1 REGULATIONS AND REQUIREMENTS

9.1.1 Training Program

All employees at a TSD facility who are directly associated with the management of dangerous waste must successfully complete a training program which ensures the facility's compliance with the dangerous waste regulations. The regulations define "facility personnel" as:

"All persons who work at, or oversee the operations of a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements (of the regulations)."

The training elements include:

- o The proper methods of handling dangerous wastes in the facility;
- o The proper response to emergencies and implementation of the contingency plan
- o Instructors knowledgeable in proper dangerous waste management procedures relative to the specific facility.

New employees should undergo training within 6 mo of employment and must be supervised by a trained person until training has been successfully completed. Annually, each employee must review the training program. The facility operating file must include a written training plan and records of each employee's completion of the training.

9.1.1.1 Training Alternatives. The regulations offer alternatives for how the training requirements can be specifically met. The training can be accomplished through a formal course presented either in the facility or by instructors from outside the facility. Alternatively, the training can be accomplished by on-the-job training (OJT) instruction from facility supervisors. It is common for the facility supervisors to attend a course taught by instructors from outside the facility and then to return to the facility to instruct the remaining facility personnel.

The specific elements in the training course should be directed toward the specific wastes, units, and activities at the TSD facility. The training program should address how the types of wastes, units, and management activities relate to the following:

- o The chemical characteristics and associated hazards of the dangerous wastes handled at the facility

- o Maintenance, inspection, and use of the facility emergency response and monitoring equipment
- o Proper implementation of the contingency plan including response to a leak, spill, fire, explosion, or groundwater contamination incident
- o Proper operation, inspection, and maintenance of waste feed cutoff systems
- o Proper operation, inspection, and maintenance of the facility communication equipment
- o Shutdown of operations.

For example, the training program should include instruction in how to verify if a tank automatic cutoff system is properly working and how to operate it manually, if necessary.

9.1.1.2 Instructors. The training instructor must have thorough knowledge of the dangerous waste regulations and how they relate to the specific nature of the facility and dangerous wastes handled at the facility. Given the ultimate responsibility of the training instructor, it is desirable for the instructor to be specifically trained in the field of dangerous waste management. On-the-job training is best taught by the facility supervisor since that person is generally in the best position to judge whether an individual has displayed sufficient skills and knowledge to perform required tasks.

9.1.1.3 New Employees. Each employee required to receive the training must do so within the first 6 mo of employment at the facility. Until the training is received, the employee must work under the direct supervision of an individual that has received the training. Thereafter, each employee must complete an annual review of the training, at a minimum. If the facility or facility operations change, or if the nature of the wastes handled at the facility change, the employees must be retrained.

9.1.2 Training Plan

A training plan documenting the training program must be prepared and included in the facility operating record. The plan should show in detail the specific training procedures and how the training requirements are met at the particular TSD facility. Specifically, the plan must include the following for each position related to the management of dangerous wastes at the TSD facility:

- o Job title and description
- o Name of employee filling the position
- o Requisite skills, education, and experience

- o Detailed, written description of the type and amount of training required for the position including course outlines, handouts, exams, etc.
- o Documentation showing that the required training, both initial and annual reviews, has been received within the required time period.

9.1.3 Training Records

Records showing that the training requirements are being satisfied must be maintained in the facility operating records. The training plan should be maintained permanently in the files. Documentation regarding individual employee's completion of the required training must be maintained for at least 3 yr after the employee's last day at the facility. The records should be detailed and complete and include the dates of each employee's training and the courses attended. They should allow an inspector to quickly determine that the facility is meeting the training requirements.

9.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the dangerous waste training requirements of this section are applicable. However, many of the units do not actively manage dangerous waste. Hence, the personnel associated with these units are not associated with the management of dangerous waste. For this reason, a dangerous waste personnel training plan for units not actively managing dangerous waste is not necessary.

9.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

9.3.1 100-D Ponds

Since the 100-D Ponds do not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.2 105-DR Sodium Fire Facility

Although the 105-DR Sodium Fire Facility does not actively manage dangerous waste, significant quantities of waste residue remain from past operations. The only personnel who routinely work at the facility are Advanced Reactor Division personnel performing inspections of the building. These employees should be trained to the specific hazards associated with

the facility and the appropriate emergency response procedures. Employees performing inspections of the facility receive hazardous waste generator training and liquid metal training, but receive no training specific to the 105-DR Sodium Fire Facility. Training records documenting each employees completed training are maintained onsite.

Action: o Develop a training program specific to the 105-DR Sodium Fire Facility which includes emergency response procedures.

9.3.3 183-H Solar Evaporation Basins

All employees who work at the 183-H Solar Evaporation Basins are required to gain certification prior to working at the facility. To become certified, the workers are required to attend dangerous waste training prior to working in the basins. The training consists of a classroom training course and training specific to the facility given by the Decommissioning Operations supervisor. The training includes specific guidance for emergency response as well as information on the dangerous waste hazards associated with the facility. Training records are maintained by the manager of Hanford Field Operations who also maintains the training plan for Decommissioning Operations personnel. The records list employees by job title and specify training requirements for each position including the frequency of retraining required. The training program for the 183-H Solar Evaporation Basin appears adequate.

Action: o None.

9.3.4 1706-KE Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.5 200 West Ash Pit

Since the 200 West Ash Pit does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.6 216-S-10 Pond and Ditch

Since the 216-S-10 Pond and Ditch do not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented.

Action: o None.

9.3.7 216-U-12 Crib

Since the 216-U-12 Crib does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.8 2101-M Pond

Since the 2101-M Pond does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.10 300 Area Solvent Evaporator

The 300 Area Solvent Evaporator does not actively manage dangerous waste therefore, a personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. It is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.11 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit does not actively manage dangerous waste, personnel dangerous waste training would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste training program be implemented at this facility.

Action: o None.

9.3.13 Hexone Tanks

The hexone tanks currently store dangerous waste remaining from past operations. Tank farms surveillance operations personnel monitoring tank liquid levels three times per week are the only persons who routinely work at the hexone tanks at this time. All tank farms surveillance operators are required to complete a dangerous waste classroom course and an OJT training course. The training program should include instructions on emergency response; however, it is not specific to the Hexone Tanks Facility.

Training records are maintained for each employee documenting completion of specific courses; however, no specific documentation was available to indicate the scope of the training specific to the Hexone Tanks Facility. Records maintained by tank farms surveillance personnel indicate the job title for each employee and the specific courses required for the position. No training plan has been prepared specific to the facility, but tank farms training manuals contains job descriptions and information regarding the training specific to specific job categories although no specific names or facilities are included.

Action: o Develop training program specific to the hexone tanks, which includes emergency response training.

 o Records of OJT training specific to the hexone tanks should be documented and included in the training records.

10.0 PREPAREDNESS AND PREVENTION (WAC 173-303-340)**10.1 REGULATIONS AND REQUIREMENTS****10.1.1 Preparedness and Prevention Requirements**

Dangerous waste TSD facilities must be designed, constructed, maintained, and operated to minimize the possibility of a release of dangerous waste to the environment. Regulations directed toward satisfying this general requirement are presented in terms of four general requirements:

- o Required equipment
- o Access to communication equipment and alarms
- o Aisle space
- o Arrangements with local authorities.

10.1.2 Required Equipment

- o An internal communication system
- o An external communication system, such as a telephone, capable of summoning emergency aid
- o Portable fire control equipment, fire extinguishers, spill-control equipment, and decontamination equipment
- o Water at sufficient pressure and volume to supply the water hoses, sprinkler systems, foaming equipment, etc.

10.1.2.1 Internal Communication. The internal communication system must allow immediate notification to all employees of any emergency and must be able to inform them of proper evacuation. The system should also immediately notify emergency response personnel within the facility as to the location and nature of the emergency. Typical internal communication systems include alarms with varying tones, intercom systems, and public address systems. This equipment must be located so that personnel have immediate access, either directly or by visual contact with someone with immediate access, wherever dangerous wastes are being handled.

10.1.2.2 External Communication. External communication systems are required so personnel are able to immediately notify emergency response personnel from outside the facility. In particular, the system should make it possible to notify the local police and fire departments or local or

state response teams as to the location, nature, and extent of the emergency situation. Typically, external communication systems consist of a telephone from which personnel are able to call the emergency response personnel. The telephone should be available at the control room or a main office. If only one person is in the facility when it is operating, that person must have immediate access to the external communication system (i.e., a hand-held radio phone if the individual is not stationed near a phone).

10.1.2.3 Fire and Spill-Control Equipment. The facility's fire control equipment should be based on the specific nature of the TSD activities occurring at the site and the associated potential fire hazards. If the wastes handled require a particular method of fire control (special foams, inert gas, dry chemicals, etc.), that type of equipment should be maintained at the facility. Similarly, the type of spill-control equipment (e.g. pumps, vacuums, absorbants, etc.) at the facility should reflect the particular nature of the materials that could potentially spill. The equipment should be stored at the facility near the location where its use would be anticipated.

10.1.2.4 Water System. The water system at the facility must provide adequate water pressure and volume to meet any emergency. The facility sprinkler system, if present, should be designed for the anticipated water pressure and volumes.

10.1.2.5 Aisle Space. The TSD facility must maintain adequate aisle space within the facility to allow the movement of emergency equipment and personnel within the facility. Adequate space should be provided to inspect the units within the facility, move maintenance and emergency equipment to areas where it could be necessary, and allow evacuation of the facility.

10.1.3 Consultation with Emergency Aid Agencies

Local agencies that may respond to an emergency at the TSD facility should be consulted to exchange information and make arrangements between the TSD facility and the agencies. Such relationships should particularly be developed with the local police and fire departments, local hospitals, and state emergency response teams. Specific information that should be provided to the local police and fire departments and emergency response personnel include:

- o Layout of the facility
- o The types, nature, amount, location, and hazards associated with the dangerous wastes handled at the facility
- o Areas in the facility where personnel are typically working
- o Entrances into the facility
- o Evacuation routes.

Information for local hospitals include the types of dangerous wastes handled at the facility and the associated health dangers associated with the wastes. The health dangers should include burns and the effects of inhalation, skin contact, ingestion, etc.

Where outside agencies decline to enter into such agreements with the TSD facility, their refusal should be documented and noted in the facility operating record.

10.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the preparedness and prevention requirements of this section are applicable. However, many of the units do not actively manage dangerous waste in any capacity. Meeting the requirements of this section at these facilities would not provide any additional benefit to their safe and proper management. Consequently, compliance with the requirements of this section for those facilities not actively managing dangerous waste was not assessed.

10.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

10.3.1 100-D Ponds

The 100-D Ponds do not actively manage dangerous waste, therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.2 105-DR Sodium Fire Facility

Although the 105-DR Sodium Fire Facility does not presently act in the capacity of a dangerous waste TSD facility, waste residues in significant quantities remain from past operations.

Communications: Due to the small size of the facility, internal communication can be accomplished through voice contact. Although no working phones are present, a fire alarm is in place at the facility and appeared to be operational, although this was not verified.

Fire and Spill-Control Equipment: Fire extinguishers were located throughout the facility. Since solid waste residues inside the facility are the only remaining waste, spill-control equipment is not necessary. Adequate water is supplied to the eyewash and a fire hydrant was located approximately 50 ft from the facility entrance.

Communications and Emergency Response Access: Facility personnel indicated that inspection of the facility are generally performed by one person. Due to the location of the fire alarm in the building, the person would have immediate access to a device capable of summoning emergency assistance.

Emergency Notification: The Hanford Site Fire Department is available to respond to emergencies at facilities on the site. However, the fire department has not been provided information specific to the sodium fire facility. The Hanford Site also has general arrangements with local hospitals and police departments; however, these agreements are not specific to the 105-DR Sodium Fire Facility.

Action: o Proper notification specific to the 105-DR Sodium Fire Facility should be provided to the Hanford Site and local emergency response authorities.

10.3.3 183-H Solar Evaporation Basins

The 183-H Solar Evaporation Basins currently store and treat dangerous waste.

Communications: Due to the small size of the facility, internal communication can be accomplished through voice contact. External communication is provided by a phone fixed at the facility and portable radios capable of summoning emergency response assistance are always used when work is performed at the facility.

Fire and Spill-Control Equipment: Fire extinguishers were located at the facility and inspected monthly. No spill-control equipment is presently in place at the facility because waste is not being removed from the facility. However, the equipment necessary to transfer the contents of the basins in the event that a leak is detected is present. Facility personnel indicated that spill-control equipment is used during waste removal operations. Adequate water is supplied by the existing original water supply system.

Communications and Emergency Response Access: Since there are always at least three people at the facility during activities and, given the small size of the facility, immediate access to an emergency communications device is maintained through visual and/or voice contact. Facility personnel indicated that at least one person remains outside the facility fence at all times. Adequate aisle space is maintained to allow unobstructed movement of emergency response equipment and personnel.

Emergency Notification: The Hanford Site Fire Department is available to respond to emergencies at facilities on the site and is aware of the closure activities at the facility. However, documentation specific to the facility (i.e., prefire plan or contingency plan) was not maintained. The Hanford Site also has general arrangements with local hospitals and police departments; however, these agreements are not specific to the solar basins.

Action: o Proper notification specific to the Solar Evaporation Basins should be provided to Hanford Site and local emergency response authorities.

10.3.4 1706-KE Treatment and Storage Facility

The 1706-KE Treatment and Storage Facility does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.5 200 West Ash Pit

5 The 200 West Ash Pit does not actively manage dangerous waste;
3 therefore, the facility was not assessed against the requirements of this
6 section.

Action: o None.

10.3.6 216-S-10 Pond and Ditch

5 The 216-S-10 Pond and Ditch do not actively manage dangerous waste;
4 therefore, the facility was not assessed against the requirements of this
2 section.

Action: o None.

10.3.7 216-U-12 Crib

9 The 216-U-12 Crib does not actively manage dangerous waste; therefore,
the facility was not assessed against the requirements of this section.

Action: o None.

10.3.8 2101-M Pond

The 2101-M Pond does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.9 2727-S Storage Facility

The 2727-S Storage Facility does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.10 300 Area Solvent Evaporator

The 300 Area Solvent Evaporator does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.11 304 Concretion Facility

The 304 Concretion Facility does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.12 E-8 Borrow Pit

The E-8 Borrow Pit does not actively manage dangerous waste; therefore, the facility was not assessed against the requirements of this section.

Action: o None.

10.3.13 Hexone Tanks

The hexone tanks currently store dangerous waste; therefore, the requirements of this section were assessed against in their entirety.

Communications: Due to the small size of the facility, internal communication can be accomplished through voice contact. No external means of communication is permanently fixed at the facility. The nearest fixed means of external communication readily available is an alarm located approximately 100 ft east of the facility. The nearest fixed telephone is located in the 2704-S Building (approximately 200 ft from the tanks); however, workers use portable radios or have access to a radio in a vehicle.

Fire and Spill-Control Equipment: A fire extinguisher (all purpose) is located at the facility and inspected monthly. No spill-control equipment is in place at the facility although, in the event that a leak is detected,

the equipment needed to transfer the tank contents to waiting tank cars is present. Adequate water is supplied by two fire hydrants each located within 75 ft of the facility. An emergency shower is located within the facility fence; however, the water supply valve is outside the fence.

Communications and Emergency Response Access: Since there are always at least two people at the facility during surveillance and maintenance activities and, given the small size of the facility, immediate access to an emergency communications device is maintained through visual and/or voice contact. Adequate aisle space is maintained to allow unobstructed movement of emergency response equipment and personnel.

Emergency Notification: The Hanford Site Fire Department is available to respond to emergencies at facilities on the site; however, the fire department has not been provided information specific to the Hexone Tanks Facility. The Hanford Site also has general arrangements with local hospitals and police departments; however, these agreements are not specific to the hexone tanks.

- 9 2 1 2 4 5 9 1 6 3 7
- Action:
- o Proper notification specific to the Hexone Tanks Facility should be provided to Hanford Site and local emergency response authorities.
 - o Given the nature of the work associated with routine surveillance activities at the tanks, and the potential for leakage associated with the leak detection response procedures which involve piping the tank contents to nearby railroad cars, appropriate spill-control and decontamination equipment should be maintained at the facility.
 - o Although not a specific regulatory requirement, the emergency shower should be modified so that it may be used if needed.

11.0 CONTINGENCY PLAN (WAC 173-303-350)

11.1 REGULATIONS AND REQUIREMENTS

11.1.1 Contingency Plan Requirements

Dangerous waste TSD facilities must develop procedures to effectively address emergencies. The procedures should lessen the impact on human health and the environment if fires, explosions, or releases of dangerous wastes to the environment occur. The emergency procedures to be followed in the TSD facility must be presented in a contingency plan. The contingency plan must include the following:

- o A detailed description of the specific actions to be taken if emergencies occur
- o A description of the arrangements made with local agencies which might be required to respond in the event of an emergency
- o A current list of the emergency coordinator(s) including work and home phone numbers and addresses
- o A list of all emergency equipment and equipment location at the facility
- o An evacuation plan for the facility personnel.

11.1.2 Content of the Contingency Plan

11.1.2.1 Detailed Responses to Emergencies. The contingency plan must present detailed instructions to facility personnel on specific actions to take in the event of emergencies. The nature of the TSD facility, its dangerous wastes management units, and the specific activities which occur in each of the units, as well as other portions of the facility, need to be considered in postulating what potential emergencies could occur.

Once the potential emergencies are identified and detailed, specific responses to those emergencies must be developed and presented. The contingency plan should be written as instructions to the facility personnel for their use during an emergency. The plan should not be a generic, standard discussion of what to do in the case of an emergency. For example, stating that, "If a spill is observed, clean it up." does not satisfy the

requirements of a contingency plan. Examples of the level of unit/event specific instructions are required are as follows.

- o If a leak is observed in the sidewalls of tank A, take the following steps.
 - Alert the emergency coordinator.
 - Turn off valve B to stop inflow into tank.
 - Confirm that the flow has been stopped by observing flow meter C.
 - Turn on pump D to empty tank.
 - Confirm that the tank is emptying by observing the level indicator on the tank.
 - Turn on sump pump E to empty the tank containment area.
- o If a fire in the building A container storage area is observed, take the following steps.
 - Initiate the fire alarm and notify the emergency coordinator.
 - Identify the source of the fire and note if drums containing chemical B is involved. If so, tell the emergency personnel when they arrive.
 - If chemical B is in the fire do not apply water, use fire extinguishers located near control panel.
 - If chemical B is not in the fire, apply water using the hoses located on south wall.

11.1.2.2 Authority During Emergencies. The plan must also include detailed discussions of who has what authority at what time. For example, the facility emergency coordinator could have the authority over a fire until the fire fighting crews arrive. Then the fire chief assumes prime responsibility.

11.1.2.3 Agreements With Local Authorities. The contingency plan should document all of the arrangements and agreements that have been made with local agencies. These agreements would be those required by the preparedness and prevention requirements (WAC 173-303-340) and include local fire departments, police departments, and local emergency response teams. The nature of the agreements should be provided so that roles and responsibilities in the event of specific types of emergencies can be determined. Copies of the contingency plans are required to be provided to the local agencies with which the facility has agreements.

11.1.2.4 List of Emergency Coordinators. The list of emergency coordinators in the contingency plan must be complete and current. Since the plan will be used as an instruction manual in the event of an emergency, it must be clear from the plan who the emergency coordinator is and how to contact that person.

11.1.2.5 List of Emergency Equipment. The contingency plan must include a list of all of the emergency equipment at the facility. This equipment is noted in the preparedness and prevention requirements (i.e., fire extinguishers, spill-control equipment, communication systems, etc.). The plan should list all of the equipment available, location within the facility, and a physical description of each item. The use(s) and capabilities of the equipment should also be provided. A plot plan is an excellent way to show the location of the emergency equipment. Again, the information should be presented in a manner which helps the facility and emergency personnel effectively respond to specific emergencies in the facility.

11.1.2.6 Evacuation Routes. Emergency evacuation routes and procedures must be presented in detail in the contingency plan. Methods to communicate the proper routes under specific emergency situations should also be documented. For example, different types of alarms could signify which specific evacuation route is appropriate in particular emergencies.

11.1.3 Filing and Modifying the Contingency Plan

A copy of the contingency plan must be maintained in the facility operating record. It should be easily available to inspectors so that they can quickly determine if the facility plan satisfies the contingency plan requirements.

The contingency plan must be amended if it fails during an emergency, if applicable regulations change, if the facility or facility operations change, if the emergency coordinators change, or if the list of emergency equipment changes.

11.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the contingency plan and emergency procedure requirements of this section are applicable. However, many of the units do not actively manage dangerous waste; hence, emergency situations at these units would not be caused by, or involve, dangerous wastes. For this reason, a dangerous waste contingency plan is not recommended to ensure the safe and proper management of facilities not actively managing dangerous waste.

11.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

11.3.1 100-D Ponds

Since the 100-D Ponds do not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.2 105-DR Sodium Fire Facility

Although the 105-DR Sodium Fire Facility does not actively manage dangerous waste, a large amount of waste residue remains from past operations which could potentially effect emergency response at the facility. Therefore, it is recommended that a dangerous waste contingency plan be implemented at this facility. No contingency plan specific to the facility is in place.

Action: o Develop a contingency plan for the sodium fire facility which contains detailed emergency response procedures specific to the facility.

11.3.3 183-H Solar Evaporation Basins

The 183-H Solar Evaporation Basins currently manage dangerous waste; therefore, the facility was assessed against the requirements of this section in entirety. The contingency plan for the 183-H Basins was not maintained immediately at the facility, but was maintained at the 105-H Trailer approximately one-half mile to the south.

The plan contained a list of the emergency coordinator and alternates with work phone numbers. No home phone numbers were listed. A list of emergency equipment including location, a description of the capabilities and an evacuation plan and map were also included. The emergency plan included generic emergency response procedures such as fire, shutdown, and spill response, but did not contain procedures specific to the 183-H Facility.

Action: o A copy of the contingency plan should be maintained at the facility for immediate access during an emergency at the basins.

 o Revise emergency plan to contain 24-h phone numbers of emergency coordinators.

- o Emergency response procedures specific to the 183-H Solar Evaporation Basins should be included in the contingency plan.

11.3.4 1706-KE Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.5 200 West Ash Pit

Since the 200 West Ash Pit does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.6 216-S-10 Pond and Ditch

Since the 216-S-10 Pond and Ditch do not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.7 216-U-12 Crib

Since the 216-U-12 Crib does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.8 2101-M Pond

Since the 2101-M Pond does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended

that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.10 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.11 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit does not actively manage dangerous waste, a dangerous waste contingency plan would provide no additional benefit to the safe and proper management of the facility. Therefore, it is recommended that no dangerous waste contingency plan be implemented at this facility.

Action: o None.

11.3.13 Hexone Tanks

No contingency plan specific to the hexone tanks currently exists. However, a procedure exists for transferring the tank contents to nearby tank cars in the event that leak is detected, although at this time the

procedure has not been approved for use. The procedure alone does not meet the requirements of this section.

- Action:
- o A contingency plan compliant with the requirements of this section and specific to the Hexone Tanks Facility should be prepared.

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12.0 EMERGENCIES (WAC 173-303-360)

12.1 REGULATIONS AND REQUIREMENTS

12.1.1 Emergency Requirements

Dangerous waste TSD facilities must satisfy specific requirements in the event of an emergency at the facility. These requirements are directed toward minimizing any hazards to human health or the environment resulting from the emergency. Although the contingency plan is to provide facility-specific instructions in the event of specific types of emergencies, the general emergency requirements present particular responses that are required of all facilities during all emergencies.

12.1.2 The Emergency Coordinator

The emergency coordinator identified in the contingency plan must have the authority to commit the necessary resources to respond to an emergency. Thus, the coordinator is typically one of the senior individuals within the facility. The emergency coordinator should be familiar with the dangerous waste management activities at the facility including the following:

- o Facility contingency plan
- o Location and properties of all dangerous wastes handled at the facility
- o Location of all records within the facility
- o Layout of the facility.

Either the emergency coordinator, or an alternate coordinator who meets the above requirements and who reports to the emergency coordinator, must be onsite at all times the facility is operating. Specific procedures should be documented regarding how an alternate coordinator remains in contact with the primary coordinator when the primary coordinator is off site.

The regulations note specific requirements that the emergency coordinator and owner/operator must satisfy in the event of an emergency. The emergency coordinator, in addition to any other activity required by the facility contingency plan, must immediately perform the following tasks.

- o Activate alarms and communication systems and notify state and local response teams if their help is necessary.
- o Identify the nature and extent of any release, fire, or explosion.

- o Assess any potential hazards to human health or the environment resulting from the emergency.
- o Report any potential threat to the area outside the facility to the appropriate local authorities and help determine if the area needs to be evacuated.
- o Take all reasonable measures to stop any releases, fires, or explosions and ensure that they do not spread or reoccur.
- o Properly treat, store, or dispose of any wastes recovered from spills or releases generated during the emergency.
- o Clean, repair, or replace any emergency equipment used or damaged by the emergency and ensure that it is in good working order before resuming operations.

12.1.3 Notification and Reports

The owner/operator must notify the regulatory agencies that the facility equipment has been properly cleaned, repaired, or replaced before resuming operations. The owner/operator must also prepare a written report which includes the following:

- o Name, address, and phone number of the facility and the owner/operator
- o Date, time, and type of emergency
- o Types and quantities of materials involved in the emergency
- o Extent of any injuries
- o An assessment of any hazards to human health or the environment due to the emergency
- o Amount and disposition of any material recovered from releases during the emergency
- o Cause of the emergency and corrective actions taken to prevent a similar incident reoccurring.

The report must be submitted within 15 d of the emergency.

12.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the emergency requirements of this section are applicable. However, many of the units do not actively manage dangerous waste; hence, emergency response situations at these facilities would not

involve dangerous waste. For this reason, a dangerous waste emergency response program would not contribute to the safe and proper management of facilities not actively managing dangerous waste.

12.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

12.3.1 100-D Ponds

Since the 100-D Ponds do not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 100-D Ponds.

Action: o None.

12.3.2 105-DR Sodium Fire Facility

No contingency plan or emergency response procedures specific to the 105-DR Sodium Fire Facility was available, although an emergency call list was present in the facility listing the appropriate personnel with home and work phone numbers to call in the event of an emergency.

Action: o Identify an emergency coordinator thoroughly familiar with the facility.

 o Develop emergency response procedures specific to the 105-DR Sodium Fire Facility.

12.3.3 183-H Solar Evaporation Basins

Emergency response procedures are contained in the building emergency plan for inactive facilities. Procedures contained within the plan are of the appropriate type (i.e., spill response, shutdown, emergency response, etc.) but are not specific to the facility.

Action: o Prepare emergency response procedures specific to the 183-H Solar Evaporation Basins.

 o Ensure the emergency coordinator(s) identified meet the requirements outlined in the above discussion.

12.3.4 1706-KE Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage dangerous waste, meeting the dangerous waste emergency response

requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 1706-KE Treatment and Storage Facility.

Action: o None.

12.3.5 200 West Ash Pit

Since the 200 West Ash Pit does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 200 West Ash Pit.

Action: o None.

12.3.6 216-S-10 Pond and Ditch

Since the 216-S-10 Pond and Ditch do not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the facility.

Action: o None.

12.3.7 216-U-12 Crib

Since the 216-U-12 Crib does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the crib.

Action: o None.

12.3.8 2101-M Pond

Since the 2101-M Pond does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 2101-M Pond.

Action: o None.

12.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 2727-S Storage Facility.

Action: o None.

12.3.10 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe management of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 300 Area Solvent Evaporator.

Action: o None.

12.3.11 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the 304 Concretion Facility.

Action: o None.

12.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit does not actively manage dangerous waste, meeting the dangerous waste emergency response requirements of this section would provide no additional benefit to the safe of the facility from a dangerous waste standpoint. It is therefore recommended that no dangerous waste emergency response program be implemented at the E-8 Borrow Pit.

Action: o None.

12.3.13 Hexone Tanks

Since the hexone tanks actively manage dangerous waste, the facility was assessed against the requirements of this section. No contingency plan

specific to the hexone tanks exists, and no emergency coordinator has been designated for the hexone tanks. A plan does exist for transfer of the tank waste to nearby tank cars in the event that a leak is detected. This is the only emergency response procedure in place specific to the Hexone Tanks Facility. Since no emergency coordinator was identified and no contingency plan specific to the hexone tanks exists, the adequacy of the facility emergency coordinator could not be assessed.

- Action:
- o Ensure an emergency coordinator thoroughly familiar with the facility operations is identified in the contingency plan.
 - o Develop emergency procedures specific to emergency response at the hexone tanks for all reasonable emergency situations.

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13.0 MANIFEST SYSTEM (WAC 173-303-370)

13.1 REGULATIONS AND REQUIREMENTS

Dangerous waste facilities that receive waste from off site are required to adhere to specific manifest practices. These manifest practices include signing procedures, recordkeeping, methods to handle discrepancies, and reasons and methods to refuse a shipment.

The Hanford Site rarely receives shipments of dangerous wastes from off site. Thus, the manifest requirements are not typically applicable to the assessment of Hanford Site facilities. If, however, shipments of dangerous wastes are received from off site for treatment or disposal, manifest requirements would apply and the facility personnel must:

- o Sign and date each copy of the manifest
- o Note any discrepancy within the manifest information or between the manifest information and the shipment
- o Provide the transporter a signed copy of the manifest
- o Return a signed copy of the manifest to the generator
- o Retain a signed copy of the manifest in the facility operating file.

If a discrepancy is noted in the manifest, it must be immediately reconciled and clarified with the generator and/or transporter. A written report to the regulatory agency explaining the discrepancy is required if the conflict is not resolved within 15 d.

13.2 APPLICABILITY

None of the subject facilities receive dangerous waste from off the Hanford Site; therefore, the manifesting requirements of this section do not apply.

13.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

Since none of the requirements of this section apply to any of the subject facilities, no corrective actions are recommended.

14.0 FACILITY RECORDKEEPING (WAC 173-303-380)

14.1 REGULATIONS AND REQUIREMENTS

14.1.1 Facility Recordkeeping Requirements

Dangerous waste TSD facilities must maintain complete and accurate records of all dangerous waste management activities that have occurred at the site. The record system should document all dangerous waste activities and allow easy reconstruction of past dangerous waste management practices. Particularly, the records should be such that an inspector from a regulatory agency can quickly determine whether the facility is operating in compliance with the dangerous waste regulations.

14.1.2 Required Records

Specific items that should be included in the facility records as a minimum are as follows.

- o Records of the amount and nature of dangerous wastes treated, stored, or disposed at the facility including dates, source, final disposition, methods, etc.
- o Records of where (what units within the facility) specific wastes have been, or are, treated, stored, or disposed.
- o Waste analysis results including laboratory test results, waste designation narratives, and any petitions regarding waste designation that have been submitted.
- o Contingency plan, emergency reports, and records associated with past emergency situations at the facility.
- o Inspection logs and records of follow-up actions, as well as results from inspections by outside inspectors.
- o Results of groundwater monitoring data and testing.
- o Estimates of closure and postclosure plans and cost.

14.1.3 Waste Identification

Records which document the nature of the wastes and their management must describe the waste by its common name and by its dangerous waste number. The TSD management method codes must also be provided. For example, a waste corrosive liquid stored in a tank would be referred to as S02 (management code for storage in a tank) of a D002 (corrosive) waste.

14.1.4 Records Location and Access

The facility dangerous waste records should be maintained in a single location separate from the general facility records so that they can be easily found and reviewed. Although it is not required by the regulations, it is recommended that a duplicate of the dangerous waste records be maintained in a separate location in case the originals are destroyed. The records must be retained at least until closure of the facility.

The records should be maintained under the control of a select few individuals within the facility. Unauthorized personnel should not be allowed access to the dangerous waste records. The records must be available for inspection upon request by the regulatory agencies.

14.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the recordkeeping requirements of this section are applicable. However, because of the differences in the facilities' operations, the number of records necessary to ensure proper operation varies with each facility.

14.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

14.3.1 100-D Ponds

Records currently maintained for the 100-D Ponds include notations of the actions associated with the ponds contained in the facility operating records (i.e., inspections, filter backwashes, basin drainages, etc.) and copies of completed inspection checklists, including the ponds. No flow meters are used to monitor discharges to the ponds; consequently, no data is available on the volumes of the discharges. The proposed closure/postclosure plan for the 100-D Ponds contains a description of the waste management techniques used at the ponds as well as a limited amount of information on the dates and nature of dangerous waste managed at the ponds.

- Action:
- o In addition to the records currently maintained, results from waste analysis (i.e., waste stream sampling, analysis results, and other waste designation documentation) and volume discharge records should be maintained.
 - o Records of the amount and nature of the dangerous waste managed in the past, including specific dates, should be maintained in the facility records.
 - o As they become available, groundwater monitoring results should be maintained in the facility records.
 - o Also, although not specifically required by the regulations, it is recommended that the facility records be maintained in a single file for easy retrieval.

14.3.2 105-DR Sodium Fire Facility

Records of the amount and nature of materials managed at the 105-DR Sodium Fire Facility are available in past operating logs maintained onsite. Past Hanford Site annual reports also contain information on the facility's previous operation. Records of the characterization work performed on the remaining waste residual are maintained by Advanced Reactor Division personnel. Inspection records are not maintained. Although it was indicated that the fire extinguishers within the facility are inspected, the inspection tag attached to them had not been signed recently.

- Action:
- o Inspection records as previously discussed should be maintained for at least 3 yr.
 - o Ensure that the inspection tags attached to the fire extinguishers are filled out each time the units are inspected.
 - o Although not a requirement of the regulations, it is recommended that all the existing and future records associated with the 105-DR Sodium Fire Facility be maintained in a single file.

14.3.3 183-H Solar Evaporation Basins

Records of the amount and nature of the dangerous waste managed at the 183-H Solar Evaporation Basins are available. The proposed closure plan for the facility contains information on the methods of treatment used at the facility in addition to detailed waste analysis documentation on the facility waste. Operating records on the amount of waste treated during the evaporation season are maintained for Basin No. 2; however, no records are maintained on the amount of waste treated through evaporation during rest of the year. No level monitoring is performed on Basin No. 3. The groundwater monitoring data is maintained onsite. Inspection records, although compiled by Decontamination and Decommissioning Operations personnel, are maintained by 100-N personnel.

- Action:
- o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, groundwater monitoring data, closure plan, etc.) in a single file for easy reference.
 - o Develop operating record system to accurately determine amount of waste treated at the facility on a yearly basis.

14.3.4 1706-KE Treatment and Storage Facility

Detailed operating records of the 1706-KE facility's operation are available onsite and include a limited amount of waste analysis data. A waste designation determination for the waste stream treated is also available. No inspection records are maintained.

- Action:
- o Maintain records of inspections in operating records.
 - o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, closure plan, etc.) in a single file for easy reference.

14.3.5 200 West Ash Pit

Records of the amount and nature of wastes treated at the 200 West Ash Pit are available onsite and are contained in past Hanford Site annual reports. Inspection records, as they are currently performed, are maintained by Environmental Protection.

- Action:
- o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, closure plan, etc.) in a single file for easy reference.

14.3.6 216-S-10 Pond and Ditch

Current records of the discharges to the 216-S-10 Ditch from the 202-S Facility are not maintained; however, records of the discharges from the 207-SL Retention Basin are present (including volume and characterization data). Tank Farms Surveillance personnel maintain records of their inspections of the ditch which include liquid level measurements. Environmental Protection personnel maintain records of their inspections as previously discussed. Groundwater monitoring data specific to the 216-S-10 Pond and Ditch is not available at this time.

- Action:
- o Maintain records of all discharges to the ditch including volumes and waste characterization data.

- o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, discharge records, past waste analysis data, closure plan, etc.) in a single file for easy reference.

14.3.7 216-U-12 Crib

Limited operating records for past operations and discharges to the 216-U-12 Crib exist. Records of past discharges are maintained onsite. Characterization data and volume determinations are included, although this material has not been compiled in a specific file to document past waste management activities at the facility. Tank Farms Surveillance and Environmental Protection personnel maintain inspection records as they are performed. Groundwater monitoring data specific to the 216-U-12 Crib is not recorded at this time.

- Action:
- o Although not a regulatory requirement, maintain all facility records (i.e., inspection records, past waste analysis data, closure plan, etc.) in a single file for easy reference.

14.3.8 2101-M Pond

Few operating records exist regarding past or current usage of the pond. No flow meters are used to monitor discharges to the ponds; consequently, no data is available on the volumes of the discharges. Specific records on past chemical discharges to the 2101-M Pond were not maintained; however, estimations of the chemical discharges based on chemical inventory records have been made and are included in the draft closure plan for the facility. The plan contains a description of the past operations of the facility. Inspection records, as they are currently performed, are maintained by Environmental Protection personnel. Groundwater monitoring records are maintained by Geosciences personnel.

- Action:
- o Maintain records of all discharges to the ditch including volumes and waste characterization data.
 - o Although not specifically required by the regulations, it is recommended that the facility records be maintained in a single file for easy retrieval.

14.3.9 2727-S Storage Facility

Waste management records for the 2727-S Storage Facility past operations are maintained onsite. Completed manifests and waste analysis documentation for the waste previously stored at 2727-S Storage Facility are available and appear to be adequate. Inspections are not currently performed at the facility. The facility closure plan, as it exists, is also maintained.

- Action: o Although not specifically required by the regulations, it is recommended that all the existing facility records (i.e., waste analysis documentation, manifest records, closure plan, inspection records, etc.) be maintained in a single file.

14.3.10 300 Area Solvent Evaporator

The interim status closure plan for the 300 Area Solvent Evaporator contains a description of the method used to treat waste at the evaporator as well as general records regarding the amount, dates, and characteristics of the waste treated in the evaporator. No records were maintained during operation, indicating the exact quantities of wastes treated or the exact dates of treatment. Since no inspections, monitoring, or waste management is currently performed, current operating records are not maintained.

- Action: o Maintain records of inspections performed at the site when inspection program is established.
- o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, soil sample analysis results when available, closure plan, etc.) in a single file for easy reference.

14.3.11 304 Concretion Facility

Records of the types and amounts of waste treated at the 304 Concretion Facility are documented in past shipment records of waste to and from the facility. No inspections are currently performed at the facility; therefore, no inspection records are maintained.

- Action: o Maintain records of the facility inspections when the inspection program is established.
- o Although not a regulatory requirement, maintain all records (inspection, waste shipment, etc.) in a single file for easy reference.

14.3.12 E-8 Borrow Pit

Records of the amount and nature of wastes treated at the E-8 Borrow Pit are available onsite and are contained in past Hanford Site annual reportss. Inspection records, as they are currently performed, are maintained by Environmental Protection.

- Action: o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, closure plan, etc.) in a single file for easy reference.

14.3.13 Hexone Tanks

Past waste analysis and designation data is contained in the remediation plan for removal of the tank waste. Inspection records, as they are currently performed, are maintained by Tank Farms personnel. These inspection records contain a determination of the tanks' volumes determined each inspection.

- Action:
- o Although not a regulatory requirement, maintain all the facility records (i.e., inspection records, past waste analysis data, sample analysis results, closure plan when available, integrity assessment documentation, tank volumes, etc.) in a single file for easy reference.

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15.0 FACILITY REPORTING (WAC 173-303-390)

15.1 REGULATIONS AND REQUIREMENTS

The owner/operator of a dangerous waste management facility must submit reports on various activities at the facility. In particular the following reports are required:

- o Reports documenting unmanifested dangerous waste shipments
- o Annual reports
- o Other additional reports.

15.1.1 Unmanifested Shipments

Facilities must report dangerous waste shipments received from off site without an accompanying manifest. Since the Hanford Site rarely receives dangerous waste from off site, the Hanford Site facilities do not typically have cause to submit this type of report.

15.1.2 Annual Reports

By March 1 of each year, dangerous waste TSD facilities must submit annual reports which document the dangerous waste activities at the facility for the previous calendar year. Specific information relevant to the Hanford Site facilities that is required in the annual report includes the following.

- o The EPA/state identification number, name, and address of the facility.
- o The amount and nature of all dangerous wastes treated, stored, or disposed at the facility using the dangerous waste numbers.
- o The methods of treatment, storage, or disposal performed at the facility using the dangerous waste handling codes.
- o The most recent closure and postclosure cost estimates.

The Hanford Site submits a single annual report for the entire site. The report includes the TSD activities at each of the individual facilities. The individual facilities submit their annual information to the preparers of the overall Hanford Site annual report. The annual report references contained in the remainder of this section refer to the 1987 four-volume annual report. The first volume is entitled Annual TSD Facility Dangerous Waste Report, Dangerous Waste (DOE-RL 1987, Richland, Washington). The

second volume is entitled Annual TSD Facility Dangerous Waste Report, Mixed Waste (DOE-RL 1987, Richland, Washington). The third volume is entitled Annual Generator Dangerous Waste Report, Dangerous Waste (DOE-RL 1987, Richland, Washington). The fourth volume is entitled Annual Generator Dangerous Waste Report, Mixed Waste (DOE-RL 1987, Richland, Washington).

15.1.3 Other Reports

Other reports which may be required of the TSD facilities include reports documenting emergency situations as required in the emergency regulations and any other report that the regulatory agencies require on a case-by-case basis.

15.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the reporting requirements of this section are applicable. However, many of the facilities do not currently manage dangerous waste and do not receive dangerous waste shipments from off the Hanford Site.

15.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

15.3.1 100-D Ponds

The 100-D Ponds do not receive dangerous waste shipments from off the Hanford Site and do not currently treat, store, or dispose of dangerous waste. No entry was made to the 1987 Hanford Site annual reports reflecting waste management activities at the facility.

Action: o Ensure dangerous waste management activities at the 100-D Ponds are included in the Hanford Site annual reports.

15.3.2 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. The facility activities were included in the 1987 Hanford Site annual reports. Reporting for the facility appears adequate.

Action: o None.

15.3.3 183-H Solar Evaporation Basins

The 183-H Solar Evaporation Basins do not receive dangerous waste shipments from off the Hanford Site; however, they do currently manage dangerous waste. The 1987 Hanford Site annual reports contains the EPA/state identification number, name, and address of the facility. It also contains information on the management of dangerous waste at the 183-H Solar Evaporation Basins noting the storage and treatment of dangerous waste sludge and liquid during 1987. The facility reporting practices appear adequate.

Action: o None.

15.3.4 1706-KE Treatment and Storage Facility

The 1706-KE Treatment and Storage Facility does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. Annual reports of waste management have been submitted previously; however, facility personnel attest that no dangerous waste has ever been treated or stored at the facility. Action is currently underway to withdraw the Part A Permit Application for the facility.

Action: o Although no dangerous waste has been treated or stored at the facility during the past year, a submittal to the annual report should be made to meet the requirements of this section.

15.3.5 200 West Ashpit

The 200 West Ash Pit does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

Action: o Ensure dangerous waste management activities at the 200 West Ashpit are included in the Hanford Site annual reports.

15.3.6 216-S-10 Pond and Ditch

The 216-S-10 Pond and Ditch do not receive dangerous waste shipments from off the Hanford Site and do not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

Action: o Ensure dangerous waste management activities at the 216-S-10 Pond and Ditch are included in the Hanford Site annual reports.

15.3.7 216-U-12 Crib

The 216-U-12 Crib does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

- Action: o Ensure dangerous waste management activities at the 216-U-12 Crib are included in the Hanford Site annual reports.

15.3.8 2101-M Pond

The 2101-M Pond does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

- Action: o Ensure dangerous waste management activities at the 2101-M Pond are included in the Hanford Site annual reports.

15.3.9 2727-S Storage Facility

The 2727-S Storage Facility does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

- Action: o Ensure dangerous waste management activities at the 2727-S Storage Facility are included in the Hanford Site annual reports.

15.3.10 300 Area Solvent Evaporator

The 300 Area Solvent Evaporator does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

- Action: o Ensure appropriate entries are included in the Hanford Site annual report and identifying the 300 Area Solvent Evaporator as a nonoperating facility.

15.3.11 304 Concretion Facility

The 304 Concretion Facility does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. The facility activities were included in the 1987 Hanford Site annual reports. Reporting for the facility appears adequate.

Action: o None.

15.3.12 E-8 Borrow Pit

The E-8 Borrow Pit does not receive dangerous waste shipments from off the Hanford Site and does not currently manage dangerous waste. No entry was found in the 1987 Hanford Site annual reports indicating waste management activities at this facility.

Action: o Ensure dangerous waste management activities at the E-8 Borrow Pit are included in the Hanford Site annual reports.

15.3.13 Hexone Tanks

The hexone tanks do not receive dangerous waste shipments from off the Hanford Site; however, they do currently store dangerous waste. The 1987 Hanford Site annual reports contains the EPA/state identification number, name and address of the facility. Also included is information on the management of dangerous waste at the hexone tanks noting the storage of dangerous waste liquid during 1987. Reporting practices for the facility appear adequate.

Action: o None.

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16.0 OTHER GENERAL REQUIREMENTS (WAC 173-303-395)

16.1 REGULATIONS AND REQUIREMENTS

General requirements that apply to dangerous waste TSD facilities include the following:

- o Precautions for ignitable, reactive, or incompatible wastes
- o Labeling for tanks and containers
- o Relationships with other environmental laws and regulations
- o Loading and unloading areas
- o Storage time limits for impoundments and piles.

16.1.1 Ignitable and Reactive Wastes

The special requirements that pertain to ignitable or reactive wastes apply to wastes which are designated as such by the dangerous waste designation procedures. Specifically, any wastes meeting the characteristics described in WAC 173-303-090(5) or -090(7) are subject to these requirements. The special requirements applicable to ignitable or reactive wastes are as follows.

- o Ignitable or reactive wastes must be separated from sources of ignition such as open flames, sparks, heat, etc.
- o "No Smoking" signs must be placed wherever ignitable or reactive wastes are being handled.
- o The facility must be inspected annually by a person knowledgeable in the Washington State Uniform Fire Code (International Conference of Building Officials and Western Fire Chiefs Association, Whittier, California, May 1, 1988).

In general ignitable, reactive, or incompatible wastes and materials must be handled in a manner that does not cause the following:

- o Generate extreme heat, pressure, fire, explosion or violent reactions
- o Produce uncontrolled gases or dusts that are toxic, flammable, explosive or otherwise threaten human health or the environment
- o Damage the structural integrity of the facility or unit containing dangerous waste.

The facility must accomplish the following tasks in order to satisfy the ignitable, reactive, or incompatible waste general requirements.

- o Identify any ignitable, reactive, or incompatible wastes handled within the facility.
- o Identify potential scenarios and methods that may result in incompatible wastes being combined.
- o Identify sources of ignition or reaction within the facility.
- o Analyze handling methods and units storing ignitable, reactive, or incompatible wastes relative to the above items.
- o Analyze treatment methods and units used to render the waste nonignitable, unreactive, or compatible.

16.1.1.1 Identification of Ignitable, Reactive, or Incompatible Wastes.

The identification of any ignitable, reactive, or incompatible wastes should be made an integral part of the waste analyses plan. The plan should consider the nature of the wastes at intermediary steps in any treatment processes to determine the ignitability, reactivity, or incompatibility. All materials which come into contact with the wastes should be considered to determine any potential for incompatibility between the wastes and the materials.

The dangerous waste activities and processes should be reviewed to identify ways that incompatible wastes may inadvertently be allowed to mix. For example, containers that are supposedly empty but contain incompatible residue, or improper decontamination of tools and equipment.

16.1.1.2 Sources of Ignition. Sources of ignition may consist of other than open flames and heat. Equipment and tools used around ignitable or reactive wastes should be constructed of nonsparking materials. Ignitable wastes should be segregated from wastes which generate significant amounts of heat when exposed to common materials such as water or air. Sources of static electricity should be avoided and tanks and containers should be grounded.

16.1.1.3 Annual Fire Inspection. The purpose of the annual fire inspection is to confirm that the facility is designed and operated in conformance with the Washington State Uniform Fire Code (International Conference of Building Officials and Western Chiefs Fire Association, Whittier, California, May 1, 1988). The regulations require facilities that handle ignitable wastes to be designed, constructed, and operated in general accordance with the Washington State Uniform Fire Code. The annual inspection must be performed by a professional person who is knowledgeable of the code. The local fire marshall or a facility engineer with a background in fire codes will satisfy this criteria. The inspection should include checking for practices which present a potential for causing fires or explosions.

16.1.2 Tank and Container Labels

Tanks and containers must be marked with a label which notes the contents and the major risks associated with the wastes. Specific requirements are provided in the technological standards for each of the specific types of units.

16.1.3 Other Requirements

Other general requirements note how the dangerous waste regulations relate to other environmental laws. Other laws include those pertaining to the Clean Water Act, Toxic Substances Control Act, and Clean Air Act. Particular requirements for loading and unloading areas and storage time limits for impoundments and piles are also presented.

16.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the requirements of this section are applicable. Assessing compliance of the units with all other applicable environmental requirements (WAC 173-303-395(2)) is not within the scope of this assessment.

16.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

16.3.1 100-D Ponds

Since the 100-D Ponds do not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.2 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility does not actively manage dangerous waste at this time; however, significant quantities of waste residue resulting from past operations remain at the facility. Although the material treated at the facility during past operations was reactive, the remaining waste residue is not anticipated to be ignitable or reactive. If characterization of the waste residue shows otherwise, the facility should be managed in accordance with the requirements of this section.

Action: o None.

16.3.3 1706-KE Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.4 183-H Solar Evaporation Basins

No ignitable or reactive waste is managed at the 183-H Solar Evaporation Basins. The basins are not managed as a surface impoundment, waste pile, or land treatment facility. The facility does use waste loading and unloading areas during site closure activities, and facility personnel indicated that the areas were operated in a manner minimizing the potential for a release to the environment. Waste was not being removed from the facility at the time of this assessment; therefore, the area could not be assessed under operating conditions. Although the fence surrounding the basins is posted to restrict access to the facility, the basins themselves are required to be labeled with the major risk associated with the waste.

Action: o Post basins with a label visible for 50 ft indicating the major risk associated with the waste.

16.3.5 200 West Ash Pit

Since the 200 West Ash Pit does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.6 216-S-10 Pond and Ditch

Since the 216-S-10 Pond and Ditch do not actively manage dangerous waste, the requirements of this section apply.

Action: o None.

16.3.7 216-U-12 Crib

Since the 216-U-12 Crib does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

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16.3.8 2101-M Pond

Since the 2101-M Pond does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage dangerous waste, the requirements of this section apply.

Action: o None.

16.3.10 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.11 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit does not actively manage dangerous waste, none of the requirements of this section apply.

Action: o None.

16.3.13 Hexone Tanks

The ignitable wastes at the hexone tanks are managed in general accordance with the requirements of this section. Flame arresters are in place on the tanks and the facility is managed to reduce the possibility of accidental ignition. Systems under design supporting closure of the tanks are being designed in accordance with the requirements of this section. "No Smoking" signs were in place on the facility perimeter fence; however, no labels were present indicating the major risk(s) associated with the waste. Also, the facility is not inspected annually for compliance with the

Washington State Uniform Fire Code (International Conference of Building Officials and Western Fire Chiefs Association, Whittier, California, May 1 1988).

- Action:
- o Install signs at the facility entrance indicating the tank contents and the major risk associated with the waste (i.e., reactive or ignitable).
 - o Have facility annually inspected for compliance with the Washington State Uniform Fire Code and maintain records of inspections.

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17.0 SITING STANDARDS (WAC 173-303-420)

17.1 REGULATIONS AND REQUIREMENTS

Dangerous waste TSD facilities must meet specific standards regarding the physical location of the facility. The siting standards generally address minimum distances that TSD facilities must be from surface waters, public facilities, drinking water supplies, and other sensitive features. Facilities may not be located in earthquake sensitive areas or floodplains.

17.2 APPLICABILITY

The subject TSD facilities have been identified in Part A permit applications. Therefore, the siting requirements of this section are applicable; however, none of the facilities:

- o Are within 200 ft of a fault having displacement in the Holocene times
- o Are located in the 100 yr floodplain
- o Are located in areas under jurisdiction of the 1971 Shoreline Management Act
- o Dispose of dangerous waste over a sole source aquifer.

Therefore, the requirements of this section do not constrain any of the subject facilities.

17.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTION

The requirements of this section are not applicable to any of the subject facilities; therefore, no recommended corrective actions are provided.

18.0 BUFFER MONITORING ZONES (WAC 173-303-440)

18.1 REGULATIONS AND REQUIREMENTS

18.1.1 Ignitable or Reactive Wastes

Dangerous waste TSD facilities that handle ignitable or reactive wastes are required to maintain specific minimum distances between the TSD units and public ways, streets, and property lines. In particular, facilities treating or storing ignitable wastes in tanks must meet buffer zones specified by the National Fire Protection Association Code. The specific reference for the National Fire Protection Association requirements is discussed in Section 23.0, Guidance for Tanks.

18.1.2 Explosive Wastes

The regulations also present buffer zone requirements for dangerous wastes that are explosive. Treatment or storage of these wastes must be provided buffer zones equivalent to the Uniform Fire Code's American Table of Distances for Storage of Explosives, Table 77-201, International Conference of Building Officials and Western Fire Chiefs Association, 1979.

18.1.3 New Land-Based Facilities

The buffer zone requirements also present minimum distances that new land based TSD units are required to meet. The minimum distance is based on the travel time of the wastes from the active portion of the facility to the nearest downgradient well or surface water used for drinking water. The travel times must be longer than 3 yr for dangerous wastes and 10 yr for extremely hazardous wastes. These buffer zone requirements will likely be changed to the new siting standards currently being developed.

18.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the buffer zone requirements of this section are applicable.

**18.3 CURRENT STATUS AND RECOMMENDED
CORRECTIVE ACTIONS****18.3.1 100-D Ponds**

Since the 100-D Ponds are an existing facility, do not presently, and have not in the past managed ignitable, reactive, or explosive waste, none of the requirements of this section apply.

Action: o None.

18.3.2 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste. However, the facility was used to treat reactive materials during past operations and significant quantities of waste residue remain. Although the residue is not anticipated to be a reactive material, adequate characterization has not been performed to confirm this conclusion. The facility is located in the 100-D Area of the Hanford Site and the tanks are located many miles from the nearest public way, street, or property line.

Action: o None.

18.3.3 183-H Solar Evaporation Basins

Since the 183-H Solar Evaporation Basins are an existing facility, do not presently, and have not in the past managed ignitable, reactive, or explosive waste, none of the requirements of this section apply.

Action: o None.

**18.3.4 1706-KE Treatment and
Storage Facility**

Since the 1706-KE Treatment and Storage Facility is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.5 200 West Ash Pit

Since the 200 West Ash Pit is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.6 216-S-10 Pond and Ditch

The 216-S-10 Pond and Ditch are an existing facility and do not currently manage ignitable, reactive, or explosive dangerous waste in a treatment or storage capacity. Waste residues that remain, because the facility was used to dispose of ignitable waste during past operations, are not anticipated to pose a threat. Also, the facility is located immediately south of the 200 West Area of the Hanford Site and the facility is located several miles from the nearest public way, street, or property line.

Action: o None.

18.3.7 216-U-12 Crib

Since the 216-U-12 Crib is an existing facility, does not presently, and has not in the past managed ignitable, reactive, or explosive waste, none of the requirements of this section apply.

Action: o None.

18.3.8 2101-M Pond

Since the 2101-M Pond is an existing facility, does not presently, and has not in the past managed ignitable, reactive, or explosive waste, none of the requirements of this section apply.

Action: o None.

18.3.9 2727-S Storage Facility

Since the 2727-S Storage Facility is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.10 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.11 304 Concretion Facility

Since the 304 Concretion Facility is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.12 E-8 Borrow Pit

Since the E-8 Borrow Pit is an existing facility and does not currently manage ignitable, reactive, or explosive dangerous waste, the requirements of this section do not apply.

Action: o None.

18.3.13 Hexone Tanks

The hexone tanks currently store ignitable dangerous waste. The hexone tanks are located in the 200 West Area of the Hanford Site immediately northwest of the 202-S Building and the tanks are located several miles from the nearest public way, street, or property line.

Action: o None.

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19.0 GROUNDWATER MONITORING (40 CFR 265 SUBPART F)

19.1 REGULATIONS AND REQUIREMENTS

Dangerous waste TSD facilities with land-based units must monitor the groundwater in the area of the facility. The following are considered land-based units:

- o Landfills
- o Surface impoundments
- o Waste piles
- o Land treatment units.

Tanks which are unable to be "clean closed" (i.e., contamination remaining after closure) must be closed as landfills and require groundwater monitoring.

The responsibility for the groundwater monitoring program at the Hanford Site is currently outside the authority of the operators of the individual facilities. The groundwater monitoring program existing at the Hanford Site is not necessarily accomplished on an individual facility basis. This assessment is directed toward specific facilities and assessing each facility for compliance with the specific groundwater monitoring requirements is not within the scope of the project.

19.1.1 Elements of a Groundwater Monitoring Program

The groundwater monitoring program should include the following components:

- o Hydrological characterization of the area surrounding the facility
- o Designing a groundwater monitoring network
- o Developing and documenting proper monitoring well installation and construction methods
- o Accomplishing a field inspection program to ensure QA/QC
- o Developing methods to properly sample, test, and report the results of groundwater quality monitoring.

19.2 APPLICABILITY

The 2101-M Pond, 216-U-12 Crib, 216-S-10 Pond and Ditch, and 100-D Ponds are identified as land-based TSD facilities in the Part A permit applications and must meet the groundwater monitoring requirements of this section. The hexone tanks, 183-H Solar Evaporation Basins, 300 Area Solvent Evaporator, and 1706-KE Treatment and Storage Facility are all identified as TSD Tanks in their respective Part A permit applications. If clean closure does not occur at these facilities, the groundwater monitoring requirements will also apply to these facilities. Due to the past release, a groundwater monitoring program has been established at the 183-H Solar Evaporation Basins supporting closure of the facility. Groundwater monitoring requirements do not and will not apply to the 105-DR Sodium Fire Facility, 200 West Ash Pit, 2727-S Storage Facility, 304 Concretion Facility, and E-8 Borrow Pit.

19.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

19.3.1 100-D Ponds

No groundwater monitoring program has been implemented to monitor the area specific to the 100-D Ponds.

Action: o Install minimum number of groundwater monitoring wells and implement sampling program.

19.3.2 216-S-10 Pond and Ditch

No groundwater monitoring program has been implemented to monitor the area specific to the 216-S-10 Pond and Ditch.

Action: o Install minimum number of groundwater monitoring wells and implement sampling program.

19.3.3 216-U-12 Crib

No groundwater monitoring program has been implemented to monitor the area specific to the 216-U-12 Crib.

Action: o Install minimum number of groundwater monitoring wells and implement sampling program.

19.3.4 2101-M Pond

The minimum number of groundwater monitoring wells and sampling equipment has been installed. Sampling was initiated in August 1988. Assessing the adequacy of the existing program is not within the scope of this project. The responsibility for determination of the adequacy of the groundwater monitoring programs is that of the State and EPA.

Action: o None.

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20.0 CLOSURE (40 CFR SUBPART G)

20.1 REGULATIONS AND REQUIREMENTS

20.1.1 Closure Requirements

When dangerous waste TSD facilities are shut down or taken out of service, they must be properly closed. Closures of TSD facilities involve cleaning up all hazardous wastes at the facility and restoring the facility to an uncontaminated condition. When it is not possible to remove all dangerous wastes (referred to as "clean closure"), the owner/operator must undertake post closure care of the facility site.

20.1.1.1 Performance Standard. A closure performance standard that applies to all facilities. This performance standard requires the owner/operator to close the facility in a manner that:

- o Minimizes the need for further maintenance
- o Controls, minimizes, or eliminates releases of dangerous wastes after closure to protect public health and the environment
- o Complies with the specific closure requirements for individual waste management units (e.g., containers, tanks) set forth elsewhere in the regulations.

Clean closure must be to background environmental levels for listed and characteristic dangerous waste. Clean closure for other types of dangerous wastes, involves the removal of contamination to a certain level, depending on the contamination and other factors.

The general intent behind the performance standard is to ensure, to the maximum extent possible when a facility is closed, that it will pose no or minimal risk to people and the environment after closure. Clean closure is considered by the regulatory agencies to be the best way to achieve this standard. Even when clean closure is not possible, the same general principle of no or minimal risk will guide the agencies' reviews and comments on a facility's closure activities. The focus in these cases will be on minimizing risk to people and the environment, and on setting up the postclosure care program such that the facility will continue to pose no or minimal risk during and after the postclosure care period.

20.1.1.2 Notifications. The owner/operator must notify Ecology and EPA in writing at least 60 d before the date closure of a land disposal unit (surface impoundment, waste pile, land treatment, or landfill unit) is expected to begin. Forty-five days notice is required for all other closures.

Once a unit or facility has managed the last volume of hazardous waste, the owner/operator will have 90 d to treat, remove, or dispose onsite all

hazardous wastes in accordance with the closure plan, and 180 d to complete the remaining closure activities specified in the closure plan. Longer time periods for disposition of hazardous wastes and completion of all other closure activities can be allowed if Ecology and EPA approve them. Within 60 d after closure is completed for a land disposal unit or for an entire facility, the owner/operator must submit a written Certification of Closure to Ecology and EPA.

20.1.2 Closure Plan Requirements

The device for accomplishing the closure requirements and performance standard is the closure plan. The owner/operator must prepare a written closure plan and submit it to Ecology and EPA as part of the facility Part B permit application.

Closure plans are typically very detailed. A plan must address partial closure of units at the facility during its active life (e.g., completion and closure of one cell at a landfill) as well as final closure efforts for the entire facility. The closure plan must take into account all of the different types of waste management units and activities associated with those units when discussing the efforts that will be conducted to close. In addition, certain units (e.g., surface impoundments and tanks without secondary containment) must have contingency plans in the event that intended clean closure cannot be performed.

The closure plan must describe, in detail, the steps necessary to achieve full closure at any point during the facility's active life. This will usually result in the closure plan assuming a worst case scenario, where full closure might have to be conducted with the maximum amount of hazardous waste present onsite, and when the greatest level of waste management activities is occurring.

The closure plan must include at least the following information.

- o A description of how each management unit at the facility will be closed to achieve the closure performance standard.
- o A description of how final closure of the facility will be conducted to achieve the closure performance standard.
- o An identification of the maximum extent of operations that will be ongoing at any given time during the facility's active life (worst case closure scenario).
- o An estimate of the maximum inventory (both types and volumes) of hazardous waste that will ever be onsite during the facility's active life (worst case closure scenario).

- o Descriptions of the methods for remediating the facility during partial and final closure, including at least:
 - Removal, transport, storage (temporary and/or permanent), treatment, and disposal (offsite and onsite, where applicable) of hazardous wastes
 - Identification of the type(s) of offsite waste receiving facilities, where applicable
 - Steps needed to remove or decontaminate hazardous materials (wastes, constituents and residues) such as containment systems, equipment, structures and soils that may be contaminated
 - Sampling and analysis that will be used to determine the extent of decontamination needed to meet the closure performance standard
 - Other activities that may be needed to satisfy the closure performance standard, such as groundwater monitoring, leachate collection and run-on/run-off control
 - A schedule for closure of each management unit (partial closure) and for final closure, including at least the total time needed to close each unit and for intervening activities so that closure progress can be tracked.

When preparing the closure plan contents described above, the owner/operator must account for, in detail, the activities needed to close the facility. Closure can be broken down into the following general activities:

- o Material Removal
 - Sampling
 - Analysis
 - Remediation
 - Facility reclamation
- o Materials Staging and Disposition
 - Containment
 - Preparation for disposal
 - Transport
 - Ensuring TSD receipt
- o Closure Certification
 - Records
 - Reports.

Specific discussions and guidance for each of these areas are provided in the following paragraphs.

20.1.2.1 Material Removal. Efforts oriented specifically to removing all hazardous wastes, waste constituents and residues from the facility which are not intended to be left behind after closure. This must include decontamination measures, efforts to demonstrate clean closure (except for landfill portions of the facility) and final condition of the facility upon closure.

20.1.2.2 Sampling. Sampling activities must be directed towards proving to Ecology and EPA that no hazardous materials (wastes, constituents, residues) will remain after closure except those that are meant to be left in place.

20.1.2.3 Analysis. Analysis represents all of the different tests that will be performed to demonstrate that hazardous materials are not left after closure, or to show that only those materials intended to remain in place are actually present after closure. It must also include chain of custody and QA/QC procedures.

20.1.2.4 Remediation. Remediation provides a description of the efforts that will be undertaken to actually remove hazardous materials from the facility and remediate those areas where hazardous materials are not intended to remain. It will specify where and when analysis for clean closure will be performed. It will also specify worker, equipment, and other decontamination procedures that will be followed.

20.1.2.5 Facility Reclamation. These activities will address all of the efforts that will be undertaken to return the facility to the appearance and uses of surrounding areas. For landfills, this will particularly address areas such as final covers and revegetation.

20.1.2.6 Materials Staging and Disposition. Staging and disposition will address all activities associated with containing and preparing, for final disposition, the wastes generated during closure. The methods of transport, likely disposal practices, estimated volumes of hazardous materials to be disposed of, and disposal verification should be addressed.

20.1.2.7 Containment. These activities will describe how the various forms of containment (e.g., container, tank) will be provided for different types of hazardous materials (including contaminated equipment) while closure is conducted. Hazardous waste containment procedures will likely need to be followed unless the wastes are shown to not be hazardous.

20.1.2.8 Preparation for Disposal. These activities will likely involve arranging for a disposal facility to receive the hazardous materials generated during closure. Onsite disposal may be an option for landfills. If this is to be done, then the disposal methods should be accounted for.

20.1.2.9 Transport. Transport will provide a discussion of how offsite transport and disposal will actually be accomplished for materials that will be shipped offsite.

20.1.2.10. Ensuring TSD Receipt. This activity is primarily a matter of checking the hazardous waste manifests (or other documents if only onsite transport is involved) to confirm that the receiving TSD facility has accepted the hazardous materials.

20.1.2.11 Closure Certification. Closure certification will address those final activities necessary to document and demonstrate that the closure plan was followed and that the closure performance standard has been satisfied.

20.1.2.12 Records. Records will be sufficient to technically support the certification of closure that must be submitted to the regulatory agencies.

20.1.2.13 Reports. Reports will essentially be all written communication with Ecology and EPA necessary to certify that closure has been performed in accordance with the approved closure plan and that the closure performance standard has been met.

The owner/operator must maintain the closure plan to ensure that it is current and accounts for the anticipated closure activities. The owner/operator must submit a request for modification of the permit to amend the closure plan when the facility operations change and change the closure procedures or the closure schedule changes.

20.1.3 Postclosure Requirements

A dangerous waste TSD facility generally must comply with the postclosure requirements if hazardous waste remain at that facility after closure at levels in excess of the clean closure criteria. Postclosure is essentially a period of time (typically 30 yr) after closure during which certain caretaking activities must occur. The regulations are directed primarily toward land disposal units, such as landfills, where the dangerous wastes are anticipated to remain after the facility is shut down. However, certain surface impoundments, tanks, and waste piles also need to have contingent postclosure care even though it may be the intent to remove all wastes at closure.

20.1.3.1 Intent of Postclosure. The general intent of the postclosure care period is to allow for the detection of failures in the waste containment system after the facility has been closed. Such failures could be indicated by excessive cap settling, groundwater contamination, or increasing leachate in the collection system. During the postclosure care period, the owner/operator must ensure that the facility's postclosure monitoring and maintenance activities are performed in a manner that will allow for detection of failures (and incipient failures) in the land disposal unit(s). Postclosure use of the property must not disturb the integrity of the waste containment system (e.g., liners, caps) or the monitoring systems.

20.1.3.2 Notification Requirements. When a land disposal unit or facility is closed, two notices must be given. The first required notice is a notice, including a survey plat, to the local land authority, Ecology, and

EPA. The second required notice is a notice in the deed to the property. The basic purpose of these notices is to ensure that the presence of hazardous wastes at the site is identified to future users and purchasers of the property, and to prevent potential disturbance of the disposal units by future activities at the site.

20.1.4 Postclosure Plan Requirements

The primary device for ensuring that the closed land disposal units are not disturbed, monitoring is continued, and maintenance of the closed unit(s) is timely and appropriate, is the postclosure plan. The postclosure plan must be submitted to Ecology and EPA as part of the facility's permit application and, upon approval, becomes a condition of the permit. The plan must describe in detail the activities that will be conducted during the postclosure care period, and must address the specific postclosure requirements for each type of unit (e.g., waste pile, landfill).

For each disposal unit at a facility, the postclosure plan must identify the activities (and frequency of those activities) that will be conducted after closure of the unit. The plan's contents must include at least:

- o Descriptions of the planned groundwater monitoring activities and frequencies
- o Descriptions of the planned maintenance activities and frequencies to ensure:
 - Integrity of the containment structures (e.g., cap)
 - Function of the facility monitoring equipment
- o The name, address, and phone number of the person or office to contact regarding the unit or facility during the postclosure care period.

The postclosure plan must be followed until the end of the postclosure care period. At the end of postclosure care for each disposal unit, the owner/operator must submit to Ecology and EPA a certification that postclosure care was performed in accordance with the postclosure plan.

When preparing the postclosure plan for a unit or facility, the owner/operator should consider all of the activities that are likely to be necessary to actually provide postclosure care for the unit or facility. The activities should be considered and, as appropriate, addressed in the following plan:

- o Monitoring and inspection
 - Leachate
 - Groundwater

- Containment system integrity
- o Maintenance and corrective measures
 - Containment systems
 - Monitoring systems.

The following paragraphs provide brief discussions of the types of considerations to include when addressing these activities in the postclosure plan.

20.1.4.1 Monitoring and Inspection. These activities will identify all steps necessary to detect escape of hazardous wastes, constituents, or residues into the environment, and to detect any breakdown in the integrity of the containment systems or the monitoring systems. Containment systems include liners, caps, covers, and in the case of land treatment units, the treatment zone itself.

20.1.4.2 Leachate. Leachate may be generated during the postclosure care period. The leachate collection system should be inspected for excessive leachate generation, failure of the leachate removal system, or other related problems that could indicate loss of hazardous materials (wastes, constituents, or residues) to the environment.

20.1.4.3 Groundwater. Groundwater monitoring must be conducted during postclosure. The postclosure plan should be in compliance with the state and federal groundwater monitoring regulations. Inspection of the monitoring wells and locations should be conducted to ensure that they are maintained in good condition.

20.1.4.4 Containment System Integrity. The integrity of the containment system should be monitored and inspected to detect failures when they occur, and to identify signs of incipient failure so that preventive efforts can be undertaken prior to failure. Signs of potential failure to look for include:

- o Excessive settling of the cap
- o Excessive erosion or loss of vegetation
- o Damage to the cap from burrowing animals or plants
- o Land treatment
- o Unexpected changes in the treatment zone.

20.1.4.5 Maintenance and Corrective Measures. These activities should specify the actions that will be taken in the event that the containment systems fail or may be failing, that the monitoring systems are not operating correctly, or that monitoring indicates potential escape of hazardous materials to the environment.

20.1.4.6 Containment Systems. Containment systems should be corrected if signs of failure or incipient failure occur, and should be maintained to prevent failure from becoming a potential problem. For example, maintenance and corrective measures for the containment systems might include: maintaining the vegetative cover; maintaining any security systems in place; replacing soils lost through erosion; or digging up an entire cell to replace the liner system.

20.1.4.7 Monitoring Systems. Monitoring systems should be corrected if problems occur that compromise their operation, and maintenance and corrective measures should be planned in the event that the monitoring systems indicate release of hazardous materials to the environment. Consideration should be given to what actions will be taken if the leachate detection system fails or the groundwater monitoring system detects hazardous constituents.

5 20.2 APPLICABILITY

Each of the subject facilities has been identified in a Part A permit application. Therefore, the closure requirements of this section are applicable. However, since Ecology must approve each closure plan and the schedules for submittal of RCRA closure plans to the regulators are being negotiated in support of Hanford Federal Facility Agreement and Consent Order milestones, assessing the adequacy of the existing closure plans is not within the scope of this project. Presently, none of the subject facility closure plans have been approved.

5 20.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTION

2 20.3.1 100-D Ponds

9 A closure plan has been developed for the 100-D Ponds. The plan calls for clean closure and continued use of the ponds for receipt of nondangerous liquid waste. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.2 105-DR Sodium Fire Facility

A closure plan has been developed and is included in the Part B permit application. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.3 183-H Solar Evaporation Basins

A closure plan has been developed for the 183-H Solar Evaporation Basins. The remaining liquid waste is presently scheduled to be removed from the basins during FY 1989 and 1990. The adequacy of the closure plan is not within the scope of this assessment. The draft closure plan has been submitted to the Washington State Department of Ecology for review. Facility personnel are currently responding to the second notice of deficiency recently received.

Action: o Pursue approval of closure plan from Ecology.

20.3.4 1706-KE Treatment and Storage Facility

A closure plan has been developed and is included in the Part B permit application. The adequacy of the closure plan is not within the scope of this assessment.

Action: o If Part A Permit Application is not withdrawn, pursue approval of closure plan from Ecology.

20.3.5 200 West Ashpit

A closure plan has been developed and is included in the Part B permit application. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.6 216-S-10 Pond and Ditch

A closure plan has been developed for the 216-S-10 Pond and Ditch. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.7 216-U-12 Crib

No RCRA closure plan has been developed for the 216-U-12 Crib.

Action: o Prepare a RCRA closure plan for the 216-U-12 Crib and submit the plan to Ecology for approval.

20.3.8 2101-M Pond

A closure plan has been developed for the 2101-M Pond which calls for clean closure and continued use of the pond. The adequacy of the closure

plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.9 2727-S Storage Facility

A closure plan has been developed for the 2727-S Storage Facility. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.10 300 Area Solvent Evaporator

A closure plan has been developed for the 300 Area Solvent Evaporator and submitted to Ecology for review. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.11 304 Concretion Facility

No RCRA closure plan has been developed for the 304 Concretion Facility.

Action: o Prepare a RCRA closure plan for the 304 Concretion Facility and submit the plan to Ecology for approval.

20.3.12 E-8 Borrow Pit

A closure plan has been developed for the E-8 Borrow Pit and is included in the Part B permit application. The adequacy of the closure plan is not within the scope of this assessment.

Action: o Pursue approval of closure plan from Ecology.

20.3.13 Hexone Tanks

No RCRA closure plan has been developed for the hexone tanks.

Action: o Prepare a RCRA closure plan for the hexone tanks and submit the plan to Ecology for approval.

21.0 FINANCIAL REQUIREMENTS (40 CFR 265 SUBPART H)

21.1 REGULATIONS AND REQUIREMENTS

Dangerous waste TSD facility owners/operators must demonstrate that they have sufficient financial assets to ensure that the facility can be properly closed and, if necessary, properly maintained during postclosure. The documentation required can include certificates of insurance, proof of self-insurance, or sufficient liquid financial assets. In addition, owners/operators must have insurance for their facilities to cover accidents, releases, and other incidents.

The regulations specifically exclude federally owned facilities from the financial requirements. It has been assumed that governmental agencies have sufficient financial ability to properly close their TSD facilities, pay for postclosure care where necessary, and cover costs arising from unexpected incidents. The Hanford Site is a federally owned facility, thus it is exempt from the TSD financial requirements.

21.2 APPLICABILITY

Each of the subject facilities is located on the Hanford Site which is owned by the U.S. Department of Energy. Since the facilities are owned by the Federal Government, they are exempt from meeting the financial requirements of this section.

21.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

Since each of the facilities are exempt from the requirements of this section, no corrective actions are required. It is recommended that cost estimates for closure be maintained to support adequate appropriation of funding.

22.0 CONTAINER MANAGEMENT (40 CFR 265 SUBPART I)

22.1 REGULATIONS AND REQUIREMENTS

Containers and container areas that are used to store or treat dangerous wastes must satisfy certain minimum standards. Containers are defined as portable devices in which dangerous wastes are treated or stored. Thus, items such as tank trucks and tank trailers, as well as typical drums, are considered containers. The regulations apply to both containers and container areas.

The requirements for containers and container areas include standards for:

- o Container integrity
- o Compatibility between the container and the waste(s)
- o Handling or management of the containers
- o Inspection of the containers and container area
- o Management of ignitable, reactive, or incompatible wastes in containers
- o Labeling of the containers
- o Secondary containment.

22.1.1 Container Integrity

Containers used to handle dangerous wastes must be in good condition. The container should not be damaged structurally and should be relatively free of corrosion. Other types of unacceptable damage include dents, pitting, punctures, and separation of seams. Containers with these kinds of distress, those that leak, or are otherwise unable to contain the wastes safely, must be emptied of dangerous wastes and repaired.

22.1.2 Waste/Container Material Compatibility

Wastes handled in the containers must be compatible with the container. Contact between the container and the wastes can not result in excessive heat, fire, explosion, or any other reaction that will damage the container. Similarly, the wastes must be compatible with the materials of construction of the container area itself. For example, if a particular waste generates toxic gases when it comes into contact with concrete, the floor of the container area should not be constructed of concrete.

The waste analyses plan demonstrates that the container/waste compatibility requirements are satisfied. It should show that the wastes, the container materials, and the container area materials are compatible. The facility operating procedures should include what particular type of containers should be used for each type of dangerous waste generated at the facility.

22.1.3 Management of Containers

Containers used to handle dangerous wastes must be managed to prevent damage to the container and prohibit release of the waste from the container. Specifically, the regulations require that containers be kept closed at all times except when waste is being added or removed. The lids of the containers should be secured so that if the container were to tip, wastes would not spill. Other practices which are consistent with these requirements include:

- o Place drums vertically rather than horizontally so that the drum is stable
- o Elevate containers off of the floor so that liquids will not accumulate around the base of the container
- o Stack drums no greater than two high to reduce the potential for the drums to become unstable and fall
- o Protect container storage areas from damage by objects such as fork-lift trucks by erecting barriers or fences.

22.1.4 Inspections

Containers and container areas must be inspected at least weekly for leaks, spills, corrosion, or container distress. The inspection program should include inspection checklists which give detailed, complete guidance to the inspector regarding items to be inspected and specific parts of the items to be inspected. The checklists should also include inspection of the specific area. For example, an inspection checklist for a container area where drums are stacked on pallets should include checking for rot in the wood pallets, since rotted pallets may collapse and cause containers to fall.

The inspection checklists must be maintained in the operating file. The inspection logs, checklists, and other records should contain sufficient detail to allow an inspector to quickly determine that the facility is satisfying the container and container area inspection requirements.

22.1.5 Ignitable, Reactive, or Incompatible Wastes

Containers holding ignitable or reactive wastes are must be managed in accordance with special requirements for such types of wastes. The regulations specifically require that containers holding ignitable or reactive wastes be placed at least 50 ft from the facility property line. The wastes must also be handled in a manner that prevents the wastes from igniting or reacting. This includes keeping the containers away from open flames or other sources of heat.

Incompatible wastes are not to be mixed together in a container. Dangerous wastes are not to be placed in a container that once held an incompatible waste unless the container is washed or the wastes placed in the container will not generate uncontrolled reactions, fumes, heat, etc. In addition, containers which contain incompatible wastes must be stored in areas that are separated by a dike, berm, or other device that prevents the mixing of the incompatible wastes.

In general, the storage or treatment of ignitable, reactive, or incompatible wastes in containers must adhere to the requirements of WAC 173-303-395, Other General Requirements (Section 16.0).

22.1.6 Labeling

The Washington State addenda to interim status container requirements include specific requirements for labeling of containers handling dangerous waste. The containers must be marked with a label which notes the contents of the container and the risks associated with the wastes.

22.1.7 Secondary Containment

The Washington State dangerous waste regulations present secondary containment requirements for interim status container areas. These requirements are considered addenda to the federal Subpart I requirements.

Container areas that were constructed or installed prior to September 30, 1986 are required to have secondary containment. Existing container areas that the regulatory agency believes present a potential threat to public health or to the environment can be required to have secondary containment by the agency. A history of releases from the containers or repeated nonconformance with the container regulations are typical justifications for the agency to require secondary containment for existing container areas.

Secondary containment for container areas typically consists of an impervious floor with impervious curbs. The materials used to construct the containment area must be compatible with the wastes handled in the containers. Secondary containment areas must be protected from run-on. Rainfall, snow melt, or other water must be prevented from flowing in to the

containment area. Similarly, the containment must have sufficient volume to contain the rainfall from a 25-yr, 24-h storm without allowing the precipitation to flow out of the containment area.

Liquids accumulated in the containment area must be removed in a timely manner. If accumulated precipitation is drained out of the containment area, the draining should occur only after the accumulated liquid is determined to be nondangerous. The drainage valve should be maintained in a locked position and only opened to drain nondangerous liquid.

22.2 APPLICABILITY

Only the 105-DR Sodium Fire Facility, 2727-S Storage Facility, and the 304 Concretion Facility are identified in Part A permit applications as container storage facilities. Therefore, the container management requirements of this section only apply to these facilities.

22.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

22.3.1 105-DR Sodium Fire Facility

Since the 105-DR Sodium Fire Facility does not actively manage dangerous waste in containers at this time, the requirements of this section are not applicable.

Action: o None.

22.3.2 2727-S Storage Facility

Since the 2727-S Storage Facility does not actively manage dangerous waste in any capacity, the requirements of this section are not applicable.

Action: o None.

22.3.3 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste in any capacity, the requirements of this section are not applicable.

Action: o None.

23.0 TANKS (40 CFR SUBPART J)

23.1 REGULATIONS AND REQUIREMENTS

23.1.1 State and Federal Regulations

Tanks which handle dangerous wastes are currently regulated under Washington State Regulations (WAC 173-303-200 and -400). Federal regulations (40 CFR Subpart J), promulgated since Washington State incorporated state-specific tank standards, present much more stringent tank requirements. Since the State of Washington has been authorized to administer its own dangerous waste program, most of the more stringent federal tank regulations will not apply in Washington until the State incorporates the new standards into the State regulations.

To remain authorized, Washington State must include in its regulations tank standards which are at least as stringent as the federal standards. If the State fails to adopt the federal tank standards, they would automatically go into effect in about 2 yr, regardless. Thus, the more stringent federal tank regulations were considered in this assessment.

Specific standards are presented for the following aspects of dangerous waste tank systems:

- o Design and construction standards for new tank systems
- o Assessment of existing tank systems
- o Secondary containment
- o Spill and overflow protection
- o Inspections
- o Responses to leaks or spills
- o Closure and postclosure requirements
- o Particular requirements for ignitable, reactive, or incompatible wastes.

23.1.2 Design and Construction of Dangerous Waste Tank Systems

New tank systems which are constructed under interim status are required to adhere to specific design, construction, and installation standards. These requirements apply only to new tanks placed into service under interim status. The requirements are not applicable to existing

dangerous waste tanks.

New tank systems which are constructed under interim status must adhere to specific design and construction standards. The tank system must be designed in accordance with one of the nationally recognized tank design standards. These standards have been developed by national professional groups such as the American Concrete Institute, the American Petroleum Institute, and the American Iron and Steel Institute. Other design requirements of new dangerous waste tank systems include:

- o Detailed corrosion potential analyses and design by a corrosion expert
- o Consideration of external loads such as vehicular traffic
- o Adequate foundation support for the system
- o Documentation of compatibility between the materials of construction and the waste in the tank system.

The regulations require the owner/operator ensure that the tank system is properly installed without damage. The system must be inspected after placement, and before covering, for signs of potential distress. After inspection, and prior to being placed in service, the tank system must be tested for tightness. Other installation requirements include:

- o Proper backfill materials and techniques
- o Proper support of ancillary equipment
- o Documentation that the system was constructed and installed as designed and in accordance with the tank regulations.

23.1.3 Assessment of Existing Tank Systems

Existing interim status tank systems without containment must be assessed for structural integrity and satisfaction of the tank requirements by January 12, 1990; or by January 12, 1988 if the tank system is underground and nonenterable. All final status tanks must be assessed for integrity by January 12, 1990.

The purpose of the assessment is to determine if an existing tank without secondary containment is suitable for continued use under the new tank regulations. At a minimum, the assessment must address the following:

- o Design standards used in the original design of the tank system
- o Compatibility between the materials of construction and the wastes handled in the tank

- o Results of a leak test or an internal inspection of the tank. For underground, nonenterable tanks and for ancillary equipment, a leak test is required
- o Corrosion protection system, if one exists
- o Documented age of the tank system
- o Ancillary equipment.

The assessment must be reviewed and certified by an independent, registered professional engineer.

The assessment must include sufficient amount of detail so that an agency reviewing the assessment can determine if (1) the tank was sufficiently assessed and (2) the tank is fit for continued service. For example, an inspection of a tank should include ultrasonic testing of the tank walls, checking for cracks in the roof, walls, floors, and around fittings, checking for loose fittings, testing the corrosion protection system, etc. Each component of the assessment must be documented in detail.

23.1.4 Secondary Containment

All tanks that handle dangerous wastes must eventually have secondary containment. The specific date by which secondary containment must be provided depends on the age of the tank. Tanks constructed after the effective date of the regulations must have secondary containment. Existing tanks must have secondary containment within 2 yr of the effective date or when the tank is 15 yr old, whichever is later. Until secondary containment is provided, existing tanks must be leak tested or visually inspected in accordance with the assessment requirements noted above on an annual basis.

Typical secondary containment systems for tanks include the following:

- o Vaults in which the tank sits
- o Double wall tanks with interstitial monitoring
- o Impermeable liners
- o Concrete bases with berms.

Ancillary equipment must also be provided secondary containment. However, the following types of ancillary equipment are not required to have secondary containment if the equipment is inspected daily:

- o Nonpressurized above-ground piping
- o Welded connections
- o Sealless or magnetic-coupling pumps

- o Pressurized above-ground piping that has automatic shutoff devices.

Typical secondary containment systems for ancillary equipment includes:

- o Impermeable trenches
- o Jacketed pipes
- o Double wall pipes.

The secondary containment system must be constructed with materials that are compatible with the wastes. The containment system must also be able to support the weight of any wastes which may be contained as well as external loads.

The secondary containment system must include a leak detection system which is capable of detecting the presence of a release within 24 h. The leak detection system can consist of automatic sensing devices or a program of daily visual inspection. Automatic leak detection systems include:

- o Thermal conductivity sensors
- o Electrical resistivity sensors
- o Vapor detectors.

These sensors should be connected to an alarm system which, when initiated, alert the facility personnel that a release has occurred.

23.1.5 Spill and Overflow Prevention

Dangerous waste tanks must have spill and overflow prevention devices. Proper practices during transfer of wastes to and from the tank are also required. The regulations allow some flexibility in the specific types of spill and overflow prevention devices used on specific tanks. Spill and overflow prevention devices include:

- o Level sensors and gauges
- o High and low level alarms
- o Automatic shutoff devices for feed lines
- o Bypass systems
- o Curbing, paving, and catchment facilities at loading and unloading areas
- o Use of dry disconnect and ball valve systems.

Level sensors can range from simply noting the liquid level on a marked ruler in the tank to automatic electronic devices which provide a continuous record of the liquid level. Any type of level sensing system is acceptable if it effectively prevents overflowing of the tank. For example, if manual visual methods are used for level monitoring, the facility operating procedures should include how often the tank level is to be checked, who is responsible for checking it, and what actions should be undertaken if excessive level are noted. The times when the level is checked should be directed toward those times when the tank is being filled or emptied.

23.1.5.1 High- and Low-Level Alarms. High- and low-level alarms are considered part of the spill and overflow prevention system on dangerous waste tanks. The alarms are commonly integrated with the automatic level sensing devices and initiate when a predetermined high or low level is noted by the level sensor. Alternatively, the alarm systems can be separate from the level sensor and consist of a simple float switch.

23.1.5.2 Automatic Cutoffs. An automatic cutoff system should stop all feeds to the tank when the tank is full. Generally, this is accomplished by integrating the cutoff system with the high-level alarm and level sensing systems. For example, an integrated system consists of one where, upon noting a high level condition in the tank, the high-level alarm is sounded and pumps feeding the tank are automatically shut off. Another type of automatic cutoff system is one where all pumps are shut down in the event that a release is detected. This type of cutoff system is typically integrated with the release detection system in the secondary containment system. Automatic shut down of pumps in the event of a sudden loss of pressure in the piping, as would be expected if a major piping failure has occurred, is another type of automatic cutoff system.

23.1.5.3 Bypass Systems. A bypass system is necessary when a tank or ancillary equipment becomes inoperable and must be bypassed to complete or safely shut down the process. A sufficient number of redundant tanks and ancillary equipment should be provided so that wastes can be routed around failed equipment safely. The bypass system can be integrated with the level sensing, high-level alarm, and release detection systems so that the wastes are rerouted in the event of a high-level condition or a release to the secondary containment system.

23.1.5.4 Delivery Areas. Areas where wastes are transferred to tanks using nonpermanent connections (i.e., hoses from a delivery truck) should be paved and bermed to prevent the release of any spills to the environment. The areas should have a sump where any spills or overflows are collected and returned to the tank. Such sumps should have a release detection system and be constructed of waste compatible materials. Connections in the delivery system should be designed to minimize the amount of wastes spilled when disconnecting from the tank.

23.1.6 Inspections

23.1.6.1 Inspection Program. Dangerous waste tank systems must be inspected on a regular basis. Specifically, the following items must be inspected at least once during each operating day:

- o Overfill and spill-control equipment
- o Above-ground portions of the tank and ancillary equipment
- o Leak detection and other monitoring data
- o Area around the tank and secondary containment system.

Corrosion protection systems must be checked within 6 mo of their installation and annually thereafter. Sources of impressed current used in the corrosion protection system are required to be checked bimonthly.

Inspection of the spill and overflow prevention system should include:

- o Level sensing devices
- o High- and low-level alarm systems
- o Automatic cutoff systems
- o Bypass systems.

Each of these systems should be checked daily for proper operation. Although it is not required to actually test each system daily, some method of confirming daily that the systems are properly operating should be developed. Periodic (although not necessarily daily) testing of the alarm and cutoff systems should also be performed.

The above ground portions of the tank system must be inspected daily for signs of corrosion or release (or potential release) of wastes. This inspection is directed toward checking the tank structure and ancillary equipment for distress such as leaks, cracks, buckles, bulges, discoloration, etc. Valves, pipes, fittings, hoses, pumps, and compressors should also be checked daily for:

- o Leaks
- o Corrosion
- o Excessive vibration or swaying
- o Foundation cracks
- o Leaky seals

- o Safety equipment
- o Sufficient lubricating oil.

Data gathered from monitoring equipment should be reviewed at least daily. The data should be checked for evidence of a release (or potential release) of waste to the environment or to the secondary containment system. The data should also be checked for evidence that the system is not operating properly. Monitoring data that should be included in the daily inspection includes:

- o Leak detection sensor data
- o Level indicator data
- o Temperature and pressure data
- o Flow rate data.

The area around the tank system must be checked daily for evidence of releases of dangerous wastes or erosion. Such evidence includes wet spots or dead vegetation around the tank system. Other items to check for include erosion around the base of the tank and the secondary containment system or erosion in a dike surrounding the tank.

All of the inspections are required to be detailed and consider all portions of the tank system. It is not sufficient to simply state that "the tank system will be inspected". Rather, inspection of the above items should include checking specific features of the tank system for specific types of distress or evidence of distress.

23.1.6.2 Documenting the Inspection Program. The inspection program that addresses the above requirements should be developed and documented as part of the facility operating procedures. Inspection checklists and logs should provide specific, detailed guidance to the inspector. For example, instead of simply stating "Check tank for distress", the daily inspection checklist for the inspection of the above-ground portions of the tank system should be specific, as in the following example.

"Check Tank B, the feed and outflow piping, Pumps 101 and 102, and the secondary containment vault for:

- o Cracks
- o Corrosion
- o Discoloration
- o Excessive vibration or noise."

The detail and completeness of the inspection checklist should allow an inspector to immediately note that the inspection program satisfies the inspection requirements for dangerous waste tanks.

The inspection checklists and logs from past inspections should be

maintained in the facility operating record. The logs should note the date of the inspection, the inspector's name, and the results of the inspection. If any items requiring attention were disclosed as a result of the inspection, the log should note what actions were taken.

23.1.7 Response to Leaks or Spills

The dangerous waste tank regulations require specific responses to leaks or spills. The responses in the tank regulations are unit-specific addenda to the response procedures in the emergency requirements documented in the contingency plan. The required responses to a leak or spill from a tank system include:

- o Cessation of use, stopping flow into the tank
- o Removal of wastes from the tank (if the tank is leaking) and/or removal of the wastes from the secondary containment system
- o Containing visible releases to the environment
- o Repair of the tank system
- o Reporting.

The failed portion of the tank system should be isolated from the other portions of the system by use of the bypass system. Thus, if a leak occurs in a tank, the level of wastes in the tank should be lowered to a level below the hole in the tank. The regulations note that such waste removal must be accomplished within 24 h of detection of the release, or at the earliest practicable time if it is not possible to do so within 24 h. The removal of wastes also applies to waste released to, and contained in, the secondary containment system.

The response to a leak or spill must also include steps to immediately contain and cleanup any visible releases to the environment. Containing the release may include construction of temporary berms or closing channels to catch basins. Cleanup of visible releases could include excavation and disposal of contaminated soil or decontamination of the secondary containment system.

If the leak or spill was the result of the tank or ancillary equipment failing, the equipment must be repaired or replaced before returning to service. Major repairs and replacements must be certified as being accomplished in accordance with the dangerous waste tank design and construction requirements by an independent, registered professional engineer. If the release was from an underground, nonenterable tank, secondary containment must be provided to the tank prior to returning it to service.

If the quantity of wastes released is greater than 1 lb or if the release is not immediately cleaned up, the release must be reported to the regulatory agency within 24 h. Within 30 d of a release to the environment, a report summarizing the following must be submitted to the regulatory agency:

- o Migration route of the released wastes
- o Characteristics of the surrounding area including population, surface waters, drinking water supplies, soils and hydrogeology
- o Results of monitoring
- o Description of response actions.

23.1.8 Closure and Postclosure

When a dangerous waste tank is permanently removed from service, it must be closed in accordance with specific tank closure requirements. The tank-specific closure requirements are addenda to the general dangerous waste closure requirements presented in 40 CFR Subpart G. Thus, a closure plan must be developed for the tank system.

Closure of a dangerous waste tank must include either complete removal of all contaminated equipment and materials or the tank must be closed as a landfill and be subject to postclosure care requirements. Postclosure requirements include financial assurance, groundwater monitoring, inspection, and maintenance. Closure plans for tanks must include closure as a landfill as a contingency closure procedure in the tank closure plan. As discussed in the guidance for the general closure requirements, the closure plan must describe, in detail, the specific steps that will be taken to properly close the tank system.

23.1.9 Ignitable, Reactive, or Incompatible Wastes

Dangerous waste tanks are not allowed to handle ignitable, reactive, or incompatible wastes unless the wastes are: (1) made nonignitable, nonreactive, and compatible prior to, or immediately after, entering the tank; (2) handled in a manner that prevents the wastes from igniting or reacting; (3) the tank is used solely for emergencies.

The specific requirements under which (1) and (2) are required to be accomplished, as well as the general requirements for facilities handling ignitable, reactive, or incompatible wastes, are presented in WAC 173-303-395, Other General Requirements (Section 16.0).

Tanks which handle ignitable or reactive wastes must be located a minimum distance from public ways, streets, and adjoining property lines. The specific distance requirements are presented in the National Fire

Protection Code (WAC 51-16-050) and depend on the type of tank, the size of the tank, and the nature of the material handled in the tank.

23.1.10 Labels

The State dangerous waste regulations provide addenda to the federal dangerous waste tank labeling requirements. The State regulations note that dangerous waste tanks must be marked with a label that notes the contents of the tank and the risks associated with the wastes. The label must be legible from at least 50 ft.

23.2 APPLICABILITY

The 183-H Solar Evaporation Basins, 300 Area Solvent Evaporator, and Hexone Tanks Facility are all identified in Part A permit applications as facilities treating and/or storing dangerous waste in tanks. Therefore, the tank requirements of this section are applicable. The remaining facilities are not facilities using tank systems and are therefore not regulated by the requirements of this section.

23.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

23.3.1 183-H Solar Evaporation Basins

The 183-H Solar Evaporation Basins Facility utilizes four concrete basins for which a Part A permit application has been submitted identifying the units as waste treatment and storage tanks. Since the facility actively manages dangerous waste, the facility was assessed against the requirements of this section in their entirety.

Existing Tank Assessment: An assessment of the basins' structural integrity must be performed by January 12, 1990. Basin No. 1 is known to be structurally unfit for waste management and is no longer used. Only basins No. 2 and No. 3, which are lined with a hypalon liner, are currently used to manage waste. Although an integrity assessment is required for the basins, because the facility is already actively undergoing closure, it is not recommended. Removal of the remaining waste is scheduled to begin in June 1989.

Secondary Containment: Since the basins are greater than 15 yr old, they are required to have secondary containment within 2 yr of January 12, 1989. The existing tanks systems do not have a RCRA compliant secondary containment system in place. Although the basins are lined, no leak detection or collection capabilities are in place between the liners and basins. Since the tanks are currently undergoing closure, it is recommended that the closure activities be pursued rather than modifying the tanks for future operation.

Spill and Overflow Prevention: Although no automatic overflow prevention devices are in place, overflow of the tanks is not a concern. The tanks, with the exception of natural precipitation, are no longer receiving waste and the tanks are inspected weekly. Although exact basin levels are not routinely monitored, the basin level is noted during weekly inspections. This is adequate to ensure sufficient freeboard is maintained at the basins at all times. Based upon the precipitation rate of the surrounding environment, overflow of the basins is not a realistic concern.

Inspections: The 183-H Solar Evaporation Basins are inspected weekly by Hanford Field Operation personnel. The level of Basin No. 2 is inspected weekly during the evaporation season. Inspection checklists and basin level data are maintained onsite.

Responses to Spills or Leaks: In the event that one of the basins was known to be leaking, the basin contents would be transferred to one of the other basins. The equipment needed to perform this operation is in place at the facility. Spills from the facility are not possible at this time because waste is neither added or removed from the basins. Facility personnel indicated that when waste is removed from the facility, spill prevention and decontamination equipment is maintained at the facility. Basin No. 1 was found to be leaking and has been removed from service.

Closure and Postclosure: A RCRA closure/postclosure plan has been prepared for the facility and has been submitted to the State for approval. At this time, the State has not approved the plan. The plan calls for removal of the existing waste from the basins. However, the contaminated soil below the basins will not be removed.

Ignitable, Reactive, or Incompatible Waste: No ignitable or reactive waste is managed at the facility. The existing waste material is anticipated to be compatible with the basin construction material.

Labeling: The tanks are not currently marked with labels identifying the contents of the basins and the major risks associated with the waste.

- Action:
- o Inspections of the basins should be performed on a daily basis year round, not just during the evaporation season. Inspections of the basins should be performed on a daily basis and should include the liquid levels, spill-control equipment, tank transfer equipment, above ground portions of the tanks and ancillary equipment, and the area surrounding the tanks.
 - o Pursue State approval of the closure plan for the 183-H Basins Facility per the requirements of 40 CFR 265 Subpart G.
 - o Place a labels on the tanks which note the contents of the tanks and the major risks associated with the waste. The labels must be visible from 50 ft.

23.3.2 1706-KE Waste Treatment and Storage System

Since the 1706-KE Waste Storage Tank does not actively manage dangerous waste in any capacity, the operating requirements of this section do not apply; however, the tank should be closed as a dangerous waste management unit.

Action: o If Part A Permit Application is not withdrawn, pursue approval of facility closure plan.

23.3.3 300 Area Solvent Evaporator

Since the 300 Area Solvent Evaporator does not actively manage dangerous waste in any capacity and no tank currently exists at the facility, the requirements of this section do not apply. However, the area should be closed as a RCRA dangerous waste unit.

Action: o Pursue approval of the facility closure plan.

23.3.4 Hexone Tanks

The Hexone Tanks Facility consists of two underground, single-walled, carbon-steel storage tanks. Since the facility actively manages dangerous waste, the facility was assessed against the requirements of this section in their entirety.

Existing Tank Assessment: Since the tanks have been in service since the late 1950's, are underground, cannot be entered for inspection, and do not have secondary containment, an assessment of their structural integrity should have been performed by January 12, 1988. Facility personnel indicated that an ultrasound test was performed approximately 10 yr ago and showed no major problems. However, because of water in the tanks, the tank condition is anticipated to have deteriorated since that time. Recent tank samples showed a significant amount of rust, although the actual integrity of the tanks is unknown. Since the tanks have already been scheduled for closure based on questionable integrity, performance of an integrity assessment is not recommended.

Secondary Containment: Since the tanks are greater than 15 yr old, they are required to have secondary containment within 2 yr of January 12, 1989. The existing tanks systems do not have secondary containment. Since the tanks are currently undergoing closure, it is recommended that the closure activities be pursued rather than modifying the tanks for future operation.

Spill and Overflow Prevention: Since the tanks are no longer in service for waste receipt and are not open to the atmosphere, overflow of the tanks is not a concern. No automatic spill detection devices are in place. Leak detection is performed through manual tank level monitoring with a dip stick three times per week.

Inspections: The Hexone Tanks Facility is inspected by Tank Farms Surveillance Operations personnel for tank liquid level and general facility appearance three times per week; however, the regulations specify a daily inspection of specific items. Surveillance data sheets are maintained by tank farms personnel, but do not contain all the information required by regulation.

Response to Spills or Leaks: In the event that one or both of the hexone tanks were determined to be leaking, the contents would be transferred to nearby tank cars as specified in a written procedure, although at the time of the assessment, the procedure was not approved for use. The equipment necessary to perform the operation is in place at the facility.

Closure and Postclosure: Although no RCRA closure plan has been prepared for the Hexone Tanks at this time, a closure/remediation plan has been prepared which describes the process underway for closing the facility. The plan calls for removal of both the waste and the tanks from the facility. However, the plan does not directly discuss removal and disposal of the tanks themselves.

Ignitable, Reactive, or Incompatible Waste: Although the tanks currently store hexone, an ignitable waste, the tanks are managed in a manner to minimize the possibility of ignition. Flame arresters are in place on each tank; tank level surveillance is performed using a hardwood dip stick; and surveillance activities in general are performed in manner to prevent ignition. Closure activity equipment is being constructed to minimize the possibility of accidental ignition.

Labeling: The tanks are currently not marked with labels identifying the contents of the tanks and the major risks associated with the waste.

- Action:
- o Inspections of the tanks should be performed on a daily basis and should include the liquid levels, spill-control equipment, aboveground portions of the tanks and ancillary equipment, and the area surrounding the tanks.
 - o Prepare a RCRA closure plan for the Hexone Tanks Facility per the requirements of 40 CFR 265 Subpart G.
 - o Place labels on the tanks which note the contents of the tanks and the major risks associated with the waste. The labels must be visible from 50 ft.

24.0 SURFACE IMPOUNDMENTS (40 CFR PART 265 SUBPART K)

24.1 REGULATIONS AND REQUIREMENTS

Owners/operators of interim status facilities at which hazardous wastes are treated, stored, or disposed in surface impoundments must comply with state and federal surface impoundment requirements.

Surface impoundments must be managed in compliance with numerous requirements, including:

- o Groundwater monitoring
- o Design standards
- o Operational controls
- o Containment structures
- o Inspections
- o Closure and postclosure care
- o Special requirements for ignitable or reactive and incompatible wastes.

24.1.1 Groundwater Monitoring

Owners/operators of surface impoundments are required to install and operate a groundwater monitoring system. The system must be designed, installed, and maintained in a manner that will allow detection of hazardous constituents migrating from the surface impoundment into the groundwater. These requirements are covered in more detail in the groundwater monitoring section of this report.

24.1.2 Design Standards

Surface impoundments that receive wastes after May 8, 1985, add new units, or replace or expand existing units must install certain design features in those units. These design features are:

- o At least two liners in those units
- o Leachate collection systems above and between the liners.

The Hanford Site does not currently qualify for any exceptions to these standards.

24.1.3 Operational Controls

Owners/operators of surface impoundments must maintain sufficient freeboard to prevent any overtopping of the dike by overfilling, wave action, or storms. Unless the owner/operator obtains certification by a qualified engineer that alternate design features or operating plans will prevent overtopping of the dike, a freeboard level of at least 60 cm must be maintained.

24.1.4 Containment Systems

Earthen dikes must have a protective cover, such as grass, shale, or rock, to minimize erosion and preserve structural integrity.

24.1.5 Inspections

The owner/operator of a surface impoundment must inspect:

- o The freeboard level at least once each operating day
- o The surface impoundment, including dikes and surrounding vegetation, to detect leaks, deterioration, or failures on at least a weekly basis.

24.1.6 Closure and Postclosure Care

At closure, the owner/operator must remove or decontaminate all waste residues, contaminated containment system components (liners etc.), contaminated subsoils, structures, and equipment contaminated with waste and leachate. If the facility can not be closed in the above manner, it must be closed as a dangerous waste landfill under 40 CFR Subpart G.

24.1.7 Special Requirements for Ignitable or Reactive and Incompatible Waste

Restrictions apply to placing certain dangerous wastes in surface impoundments. Some wastes are prohibited from placement in surface impoundments while others can only be placed in surface impoundments under specific conditions.

Ignitable or reactive wastes can not be placed in a surface impoundment unless they have been treated or mixed such that the resulting waste is no longer ignitable or reactive. The general requirements for ignitable or reactive waste management of 40 CFR 265.17 must be met; the owner/operator obtains a certification that the operating plans will prevent ignition or reaction; or the surface impoundment is used solely for emergencies.

Incompatibles must not be placed in a landfill unless the general requirements for managing ignitable, reactive, or incompatible waste of 40 CFR 265.17(b) are met while managing the wastes.

24.2 APPLICABILITY

Only the 100-D Ponds, 2101-M Pond, and 216-S-10 Pond and Ditch are identified in their Part A permit application as surface impoundments. Therefore, the requirements of this section are applicable only to those facilities.

24.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

24.3.1 100-D Ponds

The 100-D Ponds do not meet the design requirements for surface impoundments. They do not have liners or leachate control systems in place, and do not presently have a RCRA groundwater program in place. The facility is operated in accordance with the general operating requirements. Discussions with facility personnel indicated that discharges to the ponds are controlled such that adequate freeboard is maintained at all times. This is achieved by visual inspection of the ponds prior to any sizable discharge (i.e., filter backwash, basin drainage). The level and structure of the ponds are inspected daily. No ignitable, reactive, or incompatible wastes are managed at the 100-D Ponds. Since the facility does not meet the design requirements for a dangerous waste surface impoundment, the facility is being closed as a dangerous waste management unit.

Action: o Pursue closure of the facility as a dangerous waste management unit.

24.3.2 216-S-10 Pond and Ditch

The 216-S-10 Pond and Ditch do not meet the design requirements for surface impoundments. The ditch continues to receive liquid discharges and does not have liners or leachate control systems in place. It does not presently have a RCRA groundwater program in place. It is operated in accordance with the general operating requirements. The pond is no longer used for receipt of liquids and because of the structure of the ditch, maintenance of sufficient freeboard is not of concern. The level and structure of the ponds are inspected routinely. No ignitable, reactive, or incompatible wastes are managed at the 216-S-10 Pond and Ditch. Since the facility does not meet the design requirements for a dangerous waste surface impoundment, it is being closed as a dangerous waste management unit.

Action: o Pursue closure of the facility as a dangerous waste management unit.

24.3.3 2101-M Pond

The 2101-M Pond currently have a groundwater monitoring program in place including the minimum number of wells. They do not have liners or leachate control systems in place. The pond is operated in accordance with the general operating requirements. Since of the structure of the facility and the anticipated volume of discharge, maintenance of adequate freeboard is not anticipated to pose a problem. The liquid level of the pond is not monitored or inspected routinely. No ignitable, reactive, or incompatible wastes are managed at the facility. Since the facility does not meet the design requirements for a dangerous waste surface impoundment, it is being closed as a dangerous waste management unit.

Action: o Pursue closure of the facility as a dangerous waste management unit.

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25.0 LANDFILLS (40 CFR 265 SUBPART N)

25.1 REGULATIONS AND REQUIREMENTS

Owners/operators of interim status facilities at which hazardous wastes are disposed of in landfills must comply with state and federal landfill requirements. Landfills include not only the typical burial trench or crib, but also surface impoundments, waste piles, and tanks if they are closed with hazardous wastes left in place.

Landfills must be managed in compliance with numerous requirements, including:

- o Design standards
- o Operational controls
- o Groundwater monitoring
- o Surveying standards
- o Closure and postclosure care
- o Certain restrictions on the types of wastes that can be landfilled.

25.1.1 Design Standards

Landfills that receive wastes after May 8, 1985, and add new units, or replace or expand existing units must install certain design features in those units. These design features are:

- o At least two liners in those units
- o Leachate collection systems above and between the liners.

The Hanford Site does not currently qualify for any exceptions to these standards.

25.1.2 Operational Controls

Owners/operators of landfills must protect the facility against run-on, contain run-off from the facility, and prevent wind dispersal of hazardous wastes from the landfill.

25.1.2.1 Run-on Systems. Run-on systems must be designed, constructed, operated, and maintained to prevent flow of run-on onto the active portion of the landfill during peak discharge from at least a 25-yr storm.

Typically, this will involve the use of diversion berms, drainage ditches and other devices to ensure that precipitation does not run onto the landfill active portion and cause excess water in the disposal area or damage to the unit.

25.1.2.2 Run-off Systems. Run-off systems must be designed, constructed, operated, and maintained to collect and control the volume of water resulting from a 24-h, 250-yr storm event. State regulations require that such run-off be considered a hazardous waste unless it did not contact wastes, or the run-off is being managed through some permitted wastewater treatment system (e.g., National Pollutant Discharge Elimination System treatment plant).

Systems and devices used to collect and hold run-on and run-off must be managed as soon as possible after storms to ensure that their design capacities are maintained. Sumps, tanks, basins or other devices in which run-on or run-off have been collected must not be emptied until it has been determined whether liquids are or are not hazardous waste. If they are hazardous, they must be managed appropriately. Valves for draining these systems should be kept closed until such time as a determination is made on proper management.

25.1.2.3 Wind Dispersion Control. If the landfill contains hazardous waste that could be dispersed by the wind, the owner/operator must control such dispersal. Control measures may include the use of daily cover materials, such as riprap or clean fill, or the use of dust suppressive materials, such as chemical binders. Regular inspection of the landfill should be performed to ensure that proper measures are being followed to prevent wind dispersal.

25.1.3 Groundwater Monitoring

Owners/operators of landfills are required to install and operate a groundwater monitoring system. The system must be designed, installed, and maintained in a manner that will allow detection of hazardous constituents migrating from the landfill into the groundwater.

25.1.4 Surveying Standards

The owner/operator must periodically survey the landfill and maintain the following in the facility operating record.

- o The exact location and dimensions, including depth, of each cell in the landfill relative to permanently surveyed benchmarks. This information must be recorded on a map.
- o The contents of each cell in the landfill and the approximate location of the hazardous wastes in each cell.

25.1.4.1 Closure and Postclosure Care. Whenever a landfill or cell is closed, the owner/operator must design, construct, and install a final landfill (or cell) cover that:

- o Has lower permeability than underlying liners or natural subsoils
- o Minimizes migration of liquids through the unit
- o Drains well and requires minimum maintenance
- o Is not adversely affected by settling, subsidence, erosion, or abrasion.

Postclosure care of the landfill must be provided and must include certain maintenance and monitoring, including the following.

- o Maintenance of the final cover. Inspection and repairs to ensure the cover's integrity should be conducted on a regular basis. Items to watch for include erosion damage, burrowing animals, deep rooting plants, run-on/run-off controls, settling, and subsidence.
- o Monitoring groundwater and maintenance of the groundwater monitoring system.
- o Protection and maintenance of surveyed benchmarks.

25.1.5 Special Hazardous Waste Requirements

Restrictions apply to the landfilling of certain hazardous wastes. Some wastes are prohibited from landfills while the landfilling of others must be conducted according to special procedures.

Ignitable, reactive, and incompatible wastes cannot be placed in landfills unless they have been treated, rendered or mixed so that the resulting waste is no longer ignitable, reactive, or incompatible. Such treatment or mixing must be conducted in a manner that complies with the special requirements of WAC 17-303-395.

As of May 8, 1985, bulk or noncontainerized liquid wastes and wastes containing free liquids cannot be placed in a landfill. These wastes must be chemically stabilized or solidified prior to disposal. Use of absorbents to absorb the liquids is not an acceptable alternative to chemical stabilization/solidification. As of November 8, 1985, placement of non-hazardous liquids in a landfill is prohibited except under very stringent circumstances.

Containers holding free liquids may only be landfilled if the following conditions are met.

- o All free liquids have been eliminated (e.g., decanted, chemically stabilized, or absorbed).

- o The container is small (e.g., an ampule) or is designed to hold free liquids for reasons other than storage (e.g., a battery).
- o The container is a labpack that meets certain conditions.

Finally, state and federal regulations prohibit landfilling of certain hazardous wastes, such as solvent, dioxin, organic, and leachable inorganic wastes.

25.2 APPLICABILITY

Of the subject facilities, only the 216-U-12 Crib is identified as a landfill in the Part A permit application. Therefore, the landfill requirements of this section are applicable only to this facility.

25.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

25.3.1 216-U-12 Crib

The facility does not meet the design and operational standards for landfills (e.g., liners, leachate collection, run-on/run-off systems). Any remaining waste residue from the facility's past operations are underground and will not be dispersed by wind. A groundwater monitoring program has not been established for the facility and the facility has not been closed in conformance with the closure and postclosure care standards outlined in the above discussion.

Action: o The facility is no longer used in any capacity and does not meet the design and operational standards for landfills. It should be closed as a dangerous waste management unit.

26.0 THERMAL TREATMENT (40 CFR 265 SUBPART P)

26.1 REGULATIONS AND REQUIREMENTS

Owners/operators employing thermal treatment to treat dangerous wastes must satisfy certain minimum standards. Thermal treatment is the use of a device that primarily uses elevated temperatures to treat a waste. Thermal treatment, as addressed in these regulations and requirements, is other than an incinerator (usually an enclosed device using controlled flame combustion). Incinerators are regulated under Subpart O. Examples of thermal treatment devices include pyrolysis units, plasma areas, molten salt destruction, and wet oxidation processes.

The federal requirements for thermal treatment include standards for:

- o General operation
- o Waste analysis
- o Monitoring inspections
- o Closure
- o Open burning and waste explosives
- o Burning particular hazardous waste.

At present time there are no Washington State requirements for thermal treatment.

26.1.1 General Operation

The primary general operating requirement is that the owner/operator must be sure the thermal treatment unit is operating at steady state conditions (normal operating conditions) before adding any dangerous waste for treatment. This requirement is meant to insure complete treatment of any wastes. Steady state conditions include a constant operating temperature achieved through using auxiliary fuel (or other means). This condition is necessary unless the process is a batch thermal treatment that requires a complete thermal cycle to treat a discrete amount of dangerous waste.

26.1.2 Waste Analysis

Aside from the general waste analysis required under interim status (Section 265.13), additional analyses are required for thermal treatment. These are necessary to insure the owner/operator has sufficient understanding of the waste to properly treat it. The owner/operator must do at least two things: (1) analyze any waste that he has not previously treated

in order to establish steady state or other appropriate (if the treatment is a noncontinuous process) operating conditions, and (2) determine the type of pollutants that might be emitted during treatment. These additional analyses are important for effective, safe waste management, to ensure that any new wastes undergoing treatment will be adequately destroyed, and to make sure that procedures devices, equipment, etc. is in place to manage any generated wastes.

Federal law requires that the additional analyses must at least determine:

- o The heating value of the waste (British thermal unit content)
- o The halogen content and sulphur content
- o Concentrations of lead and mercury in the waste undergoing treatment.

The last requirement need not be fulfilled if the owner/operator has written documented data that shows lead and/or mercury are not present.

The information generated from the waste analysis must be placed in the facility operating record.

26.1.3 Monitoring and Inspections

Unit-specific inspections must be performed on thermal treatment devices. As in general inspection requirements (Section 265.15), specific items to be inspected, specific types of problems to be noted, and when (or how often) they are to be inspected must be called out in the inspection plan. These include the following.

- o Existing instruments that relate to temperature and emission control must be monitored at least every 15 min. Instruments normally include those that measure waste feed, auxiliary fuel feed, treatment process temperature, relevant process flow, and level controls.
- o The emissions (e.g., stack plume), where present, must be visually observed at least once per hour for normal appearance. This includes color and opacity of emissions.
- o The entire thermal treatment device (process and associated equipment) including pumps, valves, conveyors, pipes, etc. must be inspected at least once per day for leaks, spills, and fugitive emissions.
- o Any emergency shutdown controls and/or system alarms must be checked at least once per day to assure proper operation.

Corrective actions must be taken immediately to maintain steady state or other appropriate thermal treatment conditions, and to return any visible emissions to their normal appearance. These actions can be made automatically by operating equipment or by the operator.

Records of monitoring and inspection must be maintained in the operating log. It is useful to employ a checklist to guide the inspection of the thermal treatment unit. The checklist should reflect the appropriate level of necessary detail and can serve as the inspection log.

26.1.4 Closure

As with containers or tanks, at closure, the owner/operator must remove all dangerous waste and residues, including but not limited to ash from the thermal treatment equipment. Generally it will be necessary to remove waste to background environmental levels. The purpose of complete removal is to ensure that the thermal treatment unit will not pose an undue risk to public health and/or the environment.

26.1.5 Open Burning and Waste Explosives

Types of thermal treatment are strictly regulated by the federal government. For instance, open burning of dangerous waste is strictly prohibited. The one exception is waste explosives. These may undergo open burning and detonation. Waste explosive and detonation are defined as follows.

- o Waste explosives include waste which has the potential to detonate a bulk military propellants which cannot be safely disposed of through other modes of treatment.
- o Detonation is an explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 km/s at sea level).

If waste explosives are to undergo open burning or detonation, the owner/operator must do so in such a way that does not threaten human health or the environment. Detonation must be in accordance with the following information:

<u>Pounds of waste explosives or propellants</u>	<u>Minimum distance from open burning or detonation to the property of others</u>
0 to 100	670 ft (204 m)
101 to 1,000	1,250 ft (380 m)
1,001 to 10,000	1,730 ft (530 m)
10,001 to 30,000	2,260 ft (690 m)

26.1.6 Burning Particular Hazardous Waste

Listed chlorinated wastes (F020, F021, F022, F023, F026, F027) can be burned in thermal treatment units if the unit receives a certification from EPA stating that it can meet the performance standards for final status incinerators (Part 264 Subpart O). In order to obtain certification for a unit, the owner/operator must submit an application demonstrating that the unit can meet the above referenced performance standards. The EPA will issue a tentative decision on whether the thermal treatment unit can perform as stated, and then accept public comment for 60 d. A final determination on certification will then be made.

26.2 APPLICABILITY

The 105-DR Sodium Facility, 1706-KE Treatment and Storage Facility, 200 West Ash Pit, and E-8 Borrow Pit are facilities which treated waste through thermal treatment during their operation. The requirements of this section are applicable to only these facilities.

26.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

26.3.1 105-DR Sodium Fire Facility

The 105-DR Sodium Fire Facility is not operated in any capacity; therefore, it was not possible to assess the facility for compliance with the operational standards set forth above. However, although the facility is no longer operational, significant quantities of waste residue remain and the facility has not been closed in compliance with closure requirements.

Action: o Close the facility in conformance with the requirements outlined in this section.

26.3.2 1706-KE Treatment and Storage Facility

The 1706-KE Treatment and Storage Facility is not currently operated in any capacity; therefore, it was not possible to assess the facility for compliance with the operational standards set forth above. Facility personnel indicated that all waste had been removed from the system; however, it was not possible to determine whether waste residues remain.

Action: o Close the facility in conformance with the requirements outlined in this section.

26.3.3 200 West Ash Pit

The 200 West Ash Pit is presently not operated in any capacity; therefore, it was not possible to assess the facility for compliance with the operational standards set forth above. Although the facility is not operational, it has not been closed as an interim status facility.

Action: o Close the facility in conformance with the requirements outlined in this section.

26.3.4 E-8 Borrow Pit

The E-8 Borrow Pit is presently not operated in any capacity; therefore, it was not possible to assess the facility for compliance with the operational standards set forth above. Although the facility is not operational, it has not been closed as an interim status facility.

Action: o Close the facility in conformance with the requirements outlined in this section.

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27.0 CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT (40 CFR 265 SUBPART Q)

27.1 REGULATIONS AND REQUIREMENTS

Owners/operators of interim status facilities at which hazardous waste is chemically, physically, or biologically treated other than in tanks, surface impoundments, or land treatment facilities must comply with the requirements of this section.

Chemical, physical, and biological treatment facilities must be managed in compliance with numerous requirements, including:

- o Operational controls
- o Waste analyses and trial tests
- o Inspections
- o Closure
- o Special requirements for ignitable, reactive, and incompatible wastes.

27.1.1 Operational Controls

Dangerous waste or treatment reagents must not be placed in chemical, physical, or biological treatment processes if they could cause the system to fail before the end of its intended life. Also, the system must be equipped with a means to stop inflow if the system is continuously fed.

27.1.2 Waste Analyses and Trial Tests

In addition to the waste analysis requirements outlined in the State dangerous waste regulations (see discussion under WAC 173-303-300), the owner/operator of a chemical, physical, or biological treatment facility must conduct trial treatment tests or obtain documentation on similar processes to demonstrate compliance with the operating requirements discussed above.

27.1.3 Inspections

The owner/operator of a surface impoundment must inspect where present:

- o Discharge control and safety equipment at least once each operating day

- o Data gathered from monitoring equipment each operating day
- o The construction materials at least weekly
- o Discharge confinement structures and the areas immediately surrounding the structures for signs of leakage.

27.1.4 Closure

At closure, the owner/operator must remove all dangerous waste and dangerous waste residues, contaminated containment system components, and structures and equipment contaminated with waste.

27.1.5 Special Requirements for Ignitable or Reactive and Incompatible Waste

Restrictions apply to placing certain dangerous wastes in surface impoundments. Some wastes are prohibited from placement in surface impoundments while others can be managed in a chemical, physical, or biological treatment process under specific conditions.

Ignitable or reactive wastes cannot be placed in a chemical, physical, or biological treatment process unless they have been treated or mixed such that the resulting waste is no longer ignitable or reactive, and the general requirements for ignitable or reactive waste management of 40 CFR 265.17 are met.

Incompatibles must not be placed in a chemical, physical, or biological treatment process unless the general requirements for managing ignitable, reactive, or incompatible waste of 40 CFR 265.17(b) are met while treating the wastes.

27.2 APPLICABILITY

Only the 100-D Ponds, 105-DR Sodium Fire Facility, 1706-KE Treatment and Storage Facility, 200 West Ash Pit, 304 Concretion Facility, and E-8 Borrow Pit are identified in their Part A permit application as chemical, physical, thermal, or biological treatment facilities. The requirements of this section apply to those facilities which treat dangerous waste by chemical, physical, or biological methods other than in tanks, surface impoundments, or land treatment facilities. Therefore, these requirements are applicable to only the 100-D Ponds, the 1706-KE Treatment and Storage Facility, and the 304 Concretion Facility. The 105-DR Sodium Fire Facility, 200 West Ash Pit, and the E-8 Borrow Pit treated waste through thermal treatment.

27.3 CURRENT STATUS AND RECOMMENDED CORRECTIVE ACTIONS

27.3.1 100-D Ponds

Since the 100-D Ponds do not actively manage dangerous waste, the facility is operated in conformance with the operational controls outlined above. The facility is inspected each operating day as discussed previously.

- Action: o Since the facility is no longer operating as a dangerous waste treatment facility, it should be closed per the requirements of this section.

27.3.2 1706-KE Treatment and Storage Facility

Since the 1706-KE Treatment and Storage Facility does not actively manage dangerous waste, the facility is operated in conformance with the operational controls outlined above. The facility is not inspected each operating day as discussed previously; however, a daily inspection is not recommended because of the nonoperational status of the facility.

- Action: o Since the facility is no longer operating as a dangerous waste treatment facility, it should be closed per the requirements of this section.

27.3.3 304 Concretion Facility

Since the 304 Concretion Facility does not actively manage dangerous waste, the facility is operated in conformance with the operational controls outlined above. The facility is not inspected each operating day as discussed previously; however, a daily inspection is not recommended because of the nonoperational status of the facility.

- Action: o Since the facility is no longer operating as a dangerous waste treatment facility, it should be closed per the requirements of this section.

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